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## Introduction

This final report shows shipments by establishments in 76 defense-oriented industries to Government agencies during 1966, together with related information on employment and value added by manufacture. The data were compiled as an adjunct to the 1966 Annual Survey of Manufactures by means of a supplemental inquiry on Form MA-175, Report on Shipments to or Receipts for Work Done for Federal Government Agencies and their Contractors and Suppliers in 1966.

In this report, shipments are shown by industry and by principal procuring agency (Department of Defense, National Aeronautics and Space Administration, and Atomic Energy Commission). Shipments, value added by manufacture, and employment are presented for groups of industries for States and selected standard metropolitan statistical areas (SMSA). The project was supported by the Department of Defense, Arms Control and Disarmament Agency, National Aeronautics and Space Administration, and the Atomic Energy Commission.

As indicated in table 1, value of shipments of the industries surveyed totaled \$122.5 billion in 1966, of which approximately 29 percent was accounted for by Federal Government purchases. As a percent of the total value of shipments, Government shipments ranged from 3.7 percent, for petroleum refining, to a high of 77.3 percent, for aerospace (aircraft and missiles) industries. Direct and indirect shipments on Government account (prime contracts and subcontracts) amounted to \$16.1 billion for aerospace industries, \$5.6 billion for communication equipment, \$3.4 billion for shipbuilding and ordnance, \$1.3 billion for electronic components, \$1.9 billion for selected machinery, \$0.8 billion for instruments, and \$1.1 billion for miscellaneous industries. By State, California was highest, with Government business in the industries surveyed totaling \$8.8 billion; New York was next followed by Texas, Connecticut, and Ohio, in that order.

For 1966, the respondents were asked not to complete this form, unless they shipped \$1 million or more to Federal Government agencies. Such establishments were, however, requested to complete a series of size-range check boxes. In order to estimate for these respondents, a linear approximation to the mean value of the range was employed using grouped aggregates of data. The following are the figures used for establishments employing the check box:

Up to \$100,000, estimated at \$42,000  
 \$100,000 to \$249,000, est. at \$150,000  
 \$250,000 to \$499,999, est. at \$350,000  
 \$500,000 to \$999,999, est. at \$700,000

Estimates for these establishments are included in the "Other Government Agency Not Specifically Known" category.

This supplemental survey to the 1966 Annual Survey of Manufactures was conducted to measure the impact of Government procurement upon the manufacturing economy and geographic areas in terms of the defense-oriented industries, which account for the major portion of Government procurement. Similar data for other manufacturing industries are not available. For the most part, the industries included in this report ship finished goods or components produced to military specifications. With the exception of the machinery industries, the preponderant portion of Government business on these industries is subject to renegotiation and, therefore, is separable in the records of the respondent companies. In fact, respondents were told that they could base their subcontract shipments and receipts on those transactions, subject to the Renegotiation Act of 1951, as amended.

Approximately 7,216 establishments, accounting for over 87 percent of all shipments and receipts of these defense-oriented industries, were included in the survey. Of the establishments filing returns, 2,168 re-

ported shipments to (or receipts from) the Government of more than \$1 million, others reported no Government shipments or Government shipments of less than \$1 million. (Respondents were instructed not to complete the report if they had less than \$1 million in Government shipments).

The mailing list for the 1966 survey was derived from the reporting panel for the 1965 Annual Survey of Manufactures, but establishments with fewer than 100 employees were excluded (with the exception of industries 3679 and 3729 where a cutoff of 50 employees was used). The total of \$122.5 billion for this survey differs from the comparable industry total of \$139.9 billion that is shown in the 1966 Annual Survey of Manufactures.

In this survey, Government "shipments" consist of products shipped to or receipts for work done for Federal agencies, their contractors, subcontractors, and suppliers. The Government total is further subdivided into shipments or receipts (1) on Government prime contracts and (2) to or from other manufacturers in ultimate performance of Federal Government contracts.

Although the prime contract figures for the industries surveyed account for the great bulk of all such Government contracts in manufacturing, the subcontract data represent a much smaller proportion of the total for all manufacturing, because the usual subcontracting industries were excluded from the scope of the survey.

In interpreting the figures for subcontract work, it should be remembered that these industries do not include all basic materials and other component industries usually im-

portant in subcontracts. Shipments of materials and components purchased by the Government and furnished to contractors supplying finished equipment were reported as prime contracts.

Furthermore, there is no indication of the level of subcontracting (e.g., first tier, second tier, etc.). By the nature of the industries surveyed, it is likely that with the exception of a few industries such as electronic components, most of the subcontracting is first tier only and the pyramiding of shipment values from one tier to another is not large.

This report includes separate data on "miscellaneous industries." Respondents were instructed that if their company had significant research, development, test, evaluation, or production contracts in the fields of aerospace, atomic energy, electronics, instrumentation, ordnance, or shipbuilding, which were assigned by the company to establishments that had not been reported on form MA-100, they were to complete a form MA-175 for each such location. These nonmanufacturing facilities of the manufacturing companies reporting on this survey are classified in this category. This category also includes a small number of non-profit research corporations working on defense contracts.

In tables 4, 6, and 7 employment (other than the total) has been estimated. The estimation method used was a straight proration of the shipments data, except for a limited number of large establishments where some detailed data was available, reported by agency as a percentage of the total shipments of that establishment.

Tables 6, 7, 8, and 9 show data by State and selected SMSA. Actual figures or ranges of figures are shown for all States.

#### **DEPARTMENT OF DEFENSE AND ATOMIC ENERGY COMMISSION FACILITIES NOT COVERED BY THE SURVEY OF DEFENSE-ORIENTED INDUSTRIES**

The employment and value data presented in tables 1-9 for 1966 and 1965 afford a picture of Government activity in the private industry sector of the manufacturing economy, as defined by the selected defense-oriented industries. Activities of the largest installations supported by universities and other nonprofit organizations are included. Manufacturing activity is also carried on at Government-owned and-operated locations by the Department of Defense (DOD). The Atomic Energy Commission (AEC) contracts for the goods and services of private manufacturers and for services such as research and development in facilities maintained by universities and other nonmanufacturing organizations. Information on these DOD and AEC facilities are shown by geographic area in appendix tables B, C, D, and E. Appendix table F provides an approximation of unduplicated information between that obtained from the MA-175 survey and the DOD, AEC, and NASA facilities.

## Part I

Table 1.--VALUE OF SHIPMENTS AND RECEIPTS OF DEFENSE-ORIENTED INDUSTRIES--SUMMARY STATISTICS, BY AGENCY: 1966

(Millions of dollars)

Item	1966
Annual Survey of Manufactures (total for industries covered on MA-175)....	139,919.2
Shipments from MA-175 Survey, total <sup>1</sup> .....	122,530.5
Government shipments, total.....	35,368.1
Prime contract shipments <sup>2</sup> , total.....	26,176.0
Department of Defense (DOD).....	20,055.4
National Aeronautics and Space Agency (NASA).....	3,855.7
Atomic Energy Commission (AEC).....	1,090.8
Other agencies.....	1,174.1
Subcontract shipments <sup>2</sup> , total.....	9,192.0
Agency known, total.....	6,202.9
DOD.....	4,649.3
NASA.....	1,069.8
AEC.....	116.8
Other agencies.....	367.0
Agency not known, total.....	2,989.1
DOD, NASA, or AEC.....	1,614.1
Other agencies.....	1,375.0
Other than government shipments.....	87,164.0

<sup>1</sup>Includes value of shipments of all establishments included on the mailing panel for the industries covered.

<sup>2</sup>See text for limitations applicable to the distinction of prime versus subcontract.

Table 2.--EMPLOYEES, COST OF MATERIALS, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY GROUPS: 1966

Industry group <sup>1</sup>	Number of employees		Cost of materials		Value added by manufacture, adjusted		Value of shipments and receipts	
	Annual survey of manufactures (1,000)	MA-175 (1,000)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)
TOTAL.....	4,988.9	4,261.6	70,092.0	59,871.1	72,381.9	60,984.4	139,919.2	122,530.5
Turbines, construction machinery, machine tools, and computers and related products.....	400.3	358.2	5,546.9	5,153.4	6,879.5	5,886.5	12,021.6	11,040.1
Communication equipment.....	489.3	463.8	4,100.8	3,923.7	6,287.0	5,668.2	10,029.6	9,591.8
Electronic components and accessories.....	385.9	335.6	2,514.9	2,137.0	4,296.6	3,594.8	6,672.5	5,744.9
Aerospace industries.....	909.0	871.9	9,197.6	9,042.5	12,536.8	11,754.9	21,331.6	20,797.4
Ship building and repairing and ordnance <sup>2</sup> .....	272.0	241.9	2,317.2	2,152.0	2,829.4	2,484.1	5,032.6	4,636.1
Scientific instruments, mechanical measuring devices, optical instruments and photographic equipment.....	210.6	173.6	2,013.1	1,620.7	3,929.9	3,255.6	5,795.3	4,876.3
Miscellaneous industries <sup>3</sup> .....	(X)	49.7	(X)	265.8	(X)	1,046.0	(X)	1,311.8
Surgical and dental equipment, ophthalmic goods, and watches and watchcases.....	101.7	82.6	861.3	695.0	1,247.5	1,002.9	2,063.7	1,697.9
Other machinery.....	491.0	324.8	4,923.4	2,078.7	6,949.7	4,631.7	1,597.6	8,384.8
Electric transmission and industrial apparatus; wiring devices; and miscellaneous electrical equipment.....	490.1	408.8	4,730.0	3,835.0	6,700.7	5,571.2	11,211.9	9,406.1
Selected fabricated metal products.....	426.5	275.5	5,065.9	3,252.4	5,522.2	3,448.6	10,595.0	6,701.1
Truck bodies and truck trailers.....	59.7	40.0	900.5	607.6	636.7	413.4	1,514.2	1,021.0
Selected chemicals and allied products.....	111.5	88.5	2,283.4	1,601.4	2,767.8	1,910.4	4,864.3	3,512.1
Petroleum refineries.....	106.5	103.0	14,640.9	14,278.7	4,082.3	3,987.7	18,741.9	18,266.4
Fabricated rubber products, n.e.c.....	144.0	118.7	1,442.1	1,148.8	1,726.7	1,408.9	3,139.0	2,557.7
Selected primary metal industries.....	390.8	325.0	9,481.0	8,065.4	5,989.1	4,919.4	15,308.4	12,984.9

Note: The figures shown for the MA-175 survey differ from those of the 1966 Annual Survey of Manufactures because the MA-175 data exclude establishments with less than 100 employees. The two exceptions are industries 3679 and 3729 (where a cutoff of 50 employees is used).

n.e.c. Not elsewhere classified.

<sup>1</sup>See appendix A for a description of industry groups.

<sup>2</sup>Excludes SIC industry 1925, Guided Missiles and Space Vehicles. This industry is included in Aerospace.

<sup>3</sup>Includes figures for nonmanufacturing facilities of the manufacturing companies canvassed.

Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY AND AGENCY: 1966  
(Value figures in millions of dollars)

Code	Industry	Employees (1,000)	Value added by manufacture	Total value of shipments and receipts reported	Government shipments				
					Total	Prime contract	Sub- contract	To DOD	
								Prime contract	Sub- contract
	All industries, total.....	4,261.5	60,984.4	122,530.5	35,368.0	26,176.0	9,192.0	20,055.3	4,649.3
19	Ordnance, except complete guided missiles.	110.7	1,204.5	2,409.7	1,901.4	1,796.7	104.6	1,501.7	86.9
1929	Ammunition, n.e.c.....	33.0	318.3	645.8	525.5	561.7	36.2	509.4	260.6
1931	Tanks and tank components.....	9.8	101.7	264.0	232.0	203.3	28.7	203.3	28.7
1941	Sighting and fire control equipment.....	3.2	39.5	65.5	38.4	(20-49.9)	(5-9.9)	(20-49.9)	(5-9.9)
1951	Small arms, 30 mm. and under.....	13.9	171.0	261.2	97.6	(50-99.9)	(5-9.9)	(50-99.9)	(5-9.9)
1961	Small arms ammunition.....	18.9	219.9	465.3	303.2	302.0	1.1	(200-499.9)	(1-1.9)
1999	Ordnance and accessories, n.e.c.....	31.6	353.7	707.7	668.2	645.8	22.3	371.4	17.1
28	Chemicals and allied products.....	88.5	1,910.4	3,512.1	900.8	838.9	62.4	207.2	24.4
2813	Industrial gases.....	3.4	107.3	170.8	21.3	(10-19.9)	(2-4.9)	(5-9.9)	-
2819	Inorganic chemicals, n.e.c.....	63.3	1,574.6	2,921.7	650.7	(500-999.9)	(20-49.9)	(2-4.9)	(10-19.9)
2892	Explosives.....	21.7	228.4	419.5	228.7	212.8	15.9	(100-199.9)	(10-19.9)
2911	Petroleum refining.....	103.0	3,987.7	18,266.4	684.7	583.3	101.3	455.0	60.0
3069	Rubber products, n.e.c.....	118.7	1,408.9	2,557.7	221.6	107.1	114.5	98.5	42.6
33	Primary metal industries.....	325.0	4,919.4	12,984.8	1,491.8	216.2	1,275.6	174.7	317.5
3323	Steel foundries.....	64.2	765.2	1,149.5	81.8	1.2	80.5	(.5-9)	(10-19.9)
3339	Primary nonferrous metals, n.e.c.....	5.8	106.9	204.4	40.9	(1-1.9)	(20-49.9)	(Under .5)	(5-9.9)
3351	Copper rolling and drawing.....	39.2	798.9	2,501.5	203.6	21.4	182.2	9.9	73.9
3352	Aluminum rolling and drawing.....	60.6	769.6	2,911.8	373.0	81.7	291.2	75.9	6.4
3356	Rolling and drawing, n.e.c.....	17.9	275.8	739.3	130.0	22.2	107.8	15.3	1.3
3357	Nonferrous wire drawing, etc.....	56.2	1,172.5	3,317.1	244.0	75.4	168.5	60.1	52.1
3361	Aluminum castings.....	26.3	314.7	614.2	61.1	(5-9.9)	(50-99.9)	(5-9.9)	(2-4.9)
3369	Nonferrous castings, n.e.c.....	12.7	140.4	260.6	62.3	.1	62.2	.1	41.7
3391	Iron and steel forgings.....	33.6	458.0	1,018.0	134.5	2.0	152.5	1.6	66.6
3392	Nonferrous forgings.....	8.0	117.0	267.7	140.2	3.7	136.4	3.6	43.9
34	Fabricated metal products.....	275.5	3,448.6	6,701.0	573.1	167.6	405.4	110.0	160.8
3441	Fabricated structural steel.....	58.0	602.3	1,527.5	99.1	36.0	63.1	24.6	17.7
3443	Boiler shop products.....	56.2	683.8	1,405.4	120.9	40.0	80.8	15.6	38.0
3451	Screw machine products.....	11.4	135.1	224.5	40.8	9.5	31.2	(5-9.9)	(10-19.9)
3452	Bolts, nuts, rivets, and washers.....	53.5	764.7	1,311.8	129.7	28.5	101.2	17.2	45.3
3499	Fabricated metal products, n.e.c.....	82.3	1,092.7	1,884.1	141.2	31.0	110.1	21.5	33.5
35	Machinery, except electrical.....	682.8	10,518.1	19,424.6	1,924.4	1,083.5	840.9	745.0	385.1
3511	Steam engines and turbines.....	34.2	433.4	850.9	145.6	76.6	69.0	70.4	51.3
3519	Internal combustion engines.....	63.9	998.5	2,050.6	287.6	175.6	111.9	161.1	73.6
3531	Construction machinery.....	110.6	1,674.3	3,534.8	237.9	169.7	68.2	155.1	52.3
3537	Industrial trucks and tractors.....	19.3	315.2	623.5	51.2	41.4	9.7	(20-49.9)	(2-4.9)
3541	Metal-cutting machine tools.....	63.4	920.0	1,477.1	96.3	30.7	65.5	14.0	20.9
3542	Metal-forming machine tools.....	19.4	275.3	497.9	13.4	5.0	8.3	(2-4.9)	(1-1.9)
3561	Pumps and compressors.....	67.4	982.7	1,829.8	147.2	59.4	87.7	47.7	31.7
3562	Ball and roller bearings.....	57.9	784.8	1,317.4	113.9	16.2	97.7	15.3	11.9
3566	Power transmission equipment.....	43.7	624.1	1,014.6	58.4	6.5	51.9	5.2	27.0
3569	General industrial machines, n.e.c.....	24.9	321.6	583.2	120.6	88.0	32.6	(10-19.9)	(5-9.9)
3571	Computing and related machines.....	130.1	2,583.2	4,679.1	553.1	391.0	162.0	198.7	67.2
3599	Miscellaneous machinery.....	47.4	604.3	965.3	98.7	22.8	75.8	21.8	35.1
36	Electrical machinery.....	1,208.0	14,834.1	27,742.8	7,958.6	4,940.9	3,017.7	4,052.7	1,371.1
3611	Electric measuring instruments.....	43.1	553.9	812.5	259.2	137.1	122.1	95.8	24.8
3612	Transformers.....	37.1	517.2	926.3	32.4	10.6	21.7	(5-9.9)	(5-9.9)
3613	Switchgear and switchboards.....	54.8	771.5	1,245.6	69.2	18.5	50.6	(5-9.9)	(10-19.9)
3621	Motors and generators.....	100.0	1,205.9	2,041.5	231.0	97.2	133.8	82.5	76.8
3622	Industrial controls.....	38.1	595.8	869.7	60.6	8.2	52.3	7.5	13.7
3643	Current carrying devices.....	31.3	400.8	665.9	60.1	25.1	34.9	(5-9.9)	(5-9.9)
3661	Telephone; telegraph apparatus.....	19.0	276.5	521.8	14.8	(2-4.9)	(5-9.9)	(2-4.9)	(Under .5)
3662	Radio, TV communications equipment.....	109.1	1,359.4	2,421.3	124.9	110.5	32.3	96.4	10.4
3671	Electron tubes, receiving type.....	354.7	4,308.7	7,170.5	5,591.7	4,029.6	1,562.0	3,347.7	995.4
3672	Cathode ray picture tubes.....	45.1	684.7	1,078.6	68.9	44.7	24.2	37.2	-
3673	Electron tubes, transmitting.....	19.1	253.7	366.5	201.4	114.3	87.1	94.0	39.4
3674	Semiconductors.....	78.1	756.3	1,054.6	254.4	36.2	218.1	31.9	27.9
3679	Electronic components, n.e.c.....	193.0	1,899.9	3,244.8	740.2	169.9	570.2	133.4	115.8
3691	Storage batteries.....	14.9	216.0	468.5	53.0	26.6	26.3	(20-49.9)	(5-9.9)
3692	Primary batteries, dry and wet.....	8.7	148.9	253.0	47.3	43.7	3.6	42.4	2.6
3693	X-ray apparatus and tubes.....	5.5	93.5	167.3	20.9	10.7	10.2	(5-9.9)	(2-4.9)
3694	Engine electrical equipment.....	47.1	701.6	1,274.5	86.0	33.8	52.2	26.5	19.5
3699	Electrical products, n.e.c.....	8.4	89.0	159.1	23.8	(10-19.9)	(5-9.9)	-	-

See footnotes at end of table.

Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY AND AGENCY: 1966--Continued  
(Value figures in millions of dollars)

Code	Industry	Government shipments--Continued					Nongovernment shipments
		To NASA	To AEC	To other known agencies	Agency not specifically known (either DOD, NASA, or AEC)	Other agencies not specifically known	
	All industries, total.....	4,925.5	1,207.6	1,541.0	1,614.1	1,375.0	87,163.9
19	Ordnance, except complete guided missiles.	6.4	293.9	6.9	.2	5.2	508.3
1929	Ammunition, n.e.c.....	(1-1.9)	(10-19.9)	(2-4.9)	(under .5)	(2-4.9)	84.0
1931	Tanks and tank components.....	.1	-	-	-	-	31.9
1941	Sighting and fire control equipment.....	(2-4.9)	-	(under .5)	-	-	27.0
1951	Small arms, 30 mm. and under.....	(Under .5)	(1-1.9)	(Under .5)	(Under .5)	(Under .5)	163.5
1961	Small arms ammunition.....	-	-	(.5-.9)	(Under .5)	-	162.0
1999	Ordnance and accessories, n.e.c.....	(1-1.9)	274.6	(2-4.9)	-	(1-1.9)	39.4
28	Chemicals and allied products.....	8.9	604.3	22.6	14.1	19.0	2,611.2
2813	Industrial gases.....	(5-9.9)	-	(Under .5)	-	(2-4.9)	149.4
2819	Inorganic chemicals, n.e.c.....	(Under .5)	604.1	4.9	14.0	13.2	2,271.0
2892	Explosives.....	(Under .5)	.1	(10-19.9)	(Under .5)	(2-4.9)	190.7
2911	Petroleum refining.....	(.5-.9)	(Under .5)	(100-199.9)	(10-19.9)	(10-19.9)	17,581.7
3069	Rubber products, n.e.c.....	(1-1.9)	(.5-.9)	(10-19.9)	(5-9.9)	(50-99.9)	2,336.3
33	Primary metal industries.....	20.5	23.8	140.7	411.7	402.7	11,492.9
3323	Steel foundries.....	(Under .5)	-	(10-19.9)	(5-9.9)	(50-99.9)	1,067.7
3339	Primary nonferrous metals, n.e.c.....	2.0	14.6	(Under .5)	(10-19.9)	(Under .5)	163.5
3351	Copper rolling and drawing.....	-	.5	19.0	82.2	18.0	2,297.8
3352	Aluminum rolling and drawing.....	(Under .5)	(Under .5)	52.2	111.5	126.1	2,538.8
3356	Rolling and drawing, n.e.c.....	(Under .5)	(.5-.9)	7.4	73.0	31.9	609.3
3357	Nonferrous wire drawing, etc.....	(10-19.9)	(5-9.9)	23.2	(10-19.9)	71.5	3,073.1
3361	Aluminum castings.....	(Under .5)	(Under .5)	(5-9.9)	(20-49.9)	(20-49.9)	553.1
3369	Nonferrous castings, n.e.c.....	(.5-.9)	-	(Under .5)	(5-9.9)	(10-19.9)	198.3
3391	Iron and steel forgings.....	(Under .5)	(Under .5)	.7	71.7	13.2	863.4
3392	Nonferrous forgings.....	(2-4.9)	(1-1.9)	(10-19.9)	(5-9.9)	(50-99.9)	127.5
34	Fabricated metal products.....	32.5	28.3	56.3	81.0	104.0	6,128.0
3441	Fabricated structural steel.....	5.1	(1-1.9)	(10-19.9)	(1-1.9)	(20-49.9)	1,428.4
3443	Boiler shop products.....	(5-9.9)	25.2	(10-19.9)	(5-9.9)	(10-19.9)	1,284.6
3451	Screw machine products.....	(Under .5)	-	(.5-.9)	(2-4.9)	(10-19.9)	183.7
3452	Bolts, nuts, rivets, and washers.....	(5-9.9)	(Under .5)	(10-19.9)	(20-49.9)	(10-19.9)	1,182.0
3494	Valves and pipe fittings.....	(5-9.9)	(1-1.9)	(10-19.9)	(20-49.9)	(10-19.9)	1,742.8
3499	Fabricated metal products, n.e.c.....	(1-1.9)	-	(2-4.9)	(Under .5)	(5-9.9)	306.3
35	Machinery, except electrical.....	122.6	107.2	191.5	190.7	181.9	17,500.4
3511	Steam engines and turbines.....	11.8	(2-4.9)	(5-9.9)	-	(2-4.9)	705.2
3519	Internal combustion engines.....	(.5-.9)	(Under .5)	19.8	10.3	21.8	1,763.0
3531	Construction machinery.....	1.2	.1	15.5	-	13.5	3,296.9
3537	Industrial trucks and tractors.....	-	-	(5-9.9)	(.5-.9)	(2-4.9)	572.3
3541	Metal-cutting machine tools.....	(1-1.9)	(1-1.9)	(10-19.9)	(10-19.9)	(20-49.9)	1,380.8
3542	Metal-forming machine tools.....	(.5-.9)	(Under .5)	(1-1.9)	(Under .5)	(5-9.9)	484.5
3561	Pumps and compressors.....	(1-1.9)	(5-9.9)	8.4	29.4	22.2	1,682.7
3562	Ball and roller bearings.....	(Under .5)	(Under .5)	4.4	51.9	39.9	1,203.4
3566	Power transmission equipment.....	(.5-.9)	-	(2-4.9)	(2-4.9)	(20-49.9)	956.2
3569	General industrial machines, n.e.c.....	5.5	77.4	(5-9.9)	(1-1.9)	(2-4.9)	462.6
3571	Computing and related machines.....	96.6	19.4	95.5	57.5	17.9	4,126.0
3599	Miscellaneous machinery.....	(2-4.9)	(Under .5)	3.6	18.0	17.9	866.5
36	Electrical machinery.....	1,040.8	88.4	338.1	614.8	452.5	16,784.4
3611	Electric measuring instruments.....	31.5	6.5	13.8	63.6	22.9	553.3
3612	Transformers.....	(Under .5)	(Under .5)	(5-9.9)	(Under .5)	(10-19.9)	893.8
3613	Switchgear and switchboards.....	(2-4.9)	(Under .5)	11.6	5.7	22.6	1,176.3
3621	Motors and generators.....	(5-9.9)	(2-4.9)	25.1	20.5	16.3	1,810.4
3622	Industrial controls.....	(5-9.9)	(.5-.9)	(1-1.9)	(5-9.9)	(20-49.9)	809.0
3643	Current carrying devices.....	(.5-.9)	(.5-.9)	20.0	12.7	11.3	605.8
3644	Noncurrent carrying devices.....	(2-4.9)	-	(5-9.9)	-	(5-9.9)	506.9
3661	Telephone; telegraph apparatus.....	(5-9.9)	(.5-.9)	10.6	17.4	1.7	2,278.4
3662	Radio, TV communications equipment.....	924.2	22.7	174.7	85.3	41.5	1,579.0
3671	Electron tubes, receiving type.....	(Under .5)	(2-4.9)	(2-4.9)	(20-49.9)	(2-4.9)	1,009.6
3672	Cathode ray picture tubes.....	(2-4.9)	(10-19.9)	17.8	20.7	8.8	165.1
3673	Electron tubes, transmitting.....	(2-4.9)	(.5-.9)	4.1	79.9	104.3	800.2
3674	Semiconductors.....	5.5	(.5-.9)	33.0	258.6	142.0	2,504.6
3679	Electronic components, n.e.c.....	45.6	11.6	-	(5-9.9)	(5-9.9)	415.5
3691	Storage batteries.....	(1-1.9)	(1-1.9)	(Under .5)	(5-9.9)	(Under .5)	205.7
3692	Primary batteries, dry and wet.....	(Under .5)	(Under .5)	(1-1.9)	(.5-.9)	(1-1.9)	146.4
3693	X-ray apparatus and tubes.....	(Under .5)	(2-4.9)	(2-4.9)	(2-4.9)	(1-1.9)	1,188.5
3694	Engine electrical equipment.....	(1-1.9)	(Under .5)	7.6	6.5	23.5	135.2
3699	Electrical products, n.e.c.....	-	(10-19.9)	(2-4.9)	(5-9.9)	(Under .5)	

Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY AND AGENCY: 1966--Continued  
(Value figures in millions of dollars)

Code	Industry	Employees (1,000)	Value added by manufacture	Total value of shipments and receipts reported	Government shipments				
					Total	Prime contract	Sub- contract	To DOD	
					Prime contract	Sub- contract			
37	Transportation equipment <sup>1</sup> .....	1,043.0	13,447.8	24,044.9	17,635.6	14,856.7	2,778.9	11,512.7	1,876.8
3713	Truck and bus bodies.....	17.4	168.4	357.0	61.2	19.8	41.3	(10-19.9)	(10-19.9)
3715	Truck trailers.....	22.5	244.9	664.0	33.1	20.6	12.5	(10-19.9)	(10-19.9)
1925	Complete guided missiles.....	155.8	2,446.3	3,699.7	3,562.2	3,186.1	376.1	1,692.5	205.9
3721	Aircraft.....	353.7	4,680.4	8,964.5	6,391.6	6,039.6	352.0	5,274.5	225.6
3722	Aircraft engines and parts.....	185.6	2,508.0	4,553.4	3,457.3	2,808.2	64.9.1	2,128.9	471.2
3723	Aircraft propellers and parts.....	176.6	2,119.9	3,579.6	2,661.2	1,415.3	1,245.9	1,225.8	889.6
3729	Aircraft equipment, n.e.c.....	131.1	1,279.5	2,226.4	1,468.7	1,366.9	101.8	1,155.4	59.6
3731	Ship building and repairing.....								
38	Instruments and related products.....	256.2	4,258.5	6,574.3	957.9	648.7	309.1	571.9	149.6
3811	Scientific instruments.....	27.4	325.2	540.2	219.2	136.9	82.3	129.1	58.2
3821	Mechanical measuring devices.....	59.8	802.3	1,209.1	148.7	58.0	90.7	41.5	30.1
3831	Optical instruments and lenses.....	13.6	169.0	268.1	78.7	33.9	44.7	25.9	23.1
3842	Surgical appliances and supplies.....	26.7	380.0	632.2	73.7	57.1	16.5	(20-49.9)	(1-1.9)
3843	Dental equipment and supplies.....	6.2	92.2	138.4	(5-9.9)	(5-9.9)	(1-1.9)	(1-1.9)	(Under .5)
3851	Ophthalmic goods.....	18.8	203.0	295.8	14.9	9.8	5.0	(5-9.9)	(1-1.9)
3861	Photographic equipment.....	72.7	1,958.9	2,858.8	362.8	322.0	40.7	304.9	25.3
3871	Watches and clocks.....	28.0	307.0	597.2	46.4	19.7	26.7	19.4	8.6
3872	Watchcases.....	2.6	20.4	34.1	(5-9.9)	(2-4.9)	(Under .5)	(2-4.9)	(Under .5)
	Miscellaneous industries.....	49.6	1,046.0	1,311.8	1,117.5	936.5	181.0	625.4	173.8

Note: Figures in parentheses represent a range in place of absolute employment and dollar-value figures where they would constitute a disclosure of company data. Details may not add to the total due to independent rounding.

- Represents zero.

n.e.c. Not elsewhere classified.

<sup>1</sup>Total for Major Group 37 includes industry 1925, Complete Guided Missiles.

Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY AND AGENCY: 1966--Continued  
(Value figures in millions of dollars)

Code	Industry	Government shipments--Continued					Nongovernment shipments
		To NASA	To AEC	To other known agencies	Agency not specifically known (either DOD, NASA, or AEC)	Other agencies not specifically known	
37	Transportation equipment <sup>1</sup> .....	3,365.7	45.1	525.6	224.3	85.2	6,409.3
3713	Truck and bus bodies.....	(Under .5)	-	(10-19.9)	(10-19.9)	(5-9.9)	295.8
3715	Truck trailers.....	(Under .5)	(Under .5)	(2-4.9)	-	(1-1.9)	630.9
1925	Complete guided missiles.....	1,627.0	(10-19.9)	(20-49.9)	(Under 5)	(Under 5)	137.4
3721	Aircraft.....	768.3	(Under .5)	(100-199.9)	(2-4.9)	(1-1.9)	2,572.8
3722	Aircraft engines and parts.....	649.0	14.8	112.8	59.2	21.1	1,096.0
3723	Aircraft propellers and parts.....	17.2	18.6	23.4	146.1	40.1	918.5
3729	Aircraft equipment, n.e.c.....	{	.5-.9)	232.8	1.9	14.6	757.6
3731	Ship building and repairing.....	(2-4.9)					
38	Instruments and related products.....	42.4	13.7	73.6	49.3	56.9	5,616.7
3811	Scientific instruments.....	(5-9.9)	.5-.9)	(2-4.9)	(10-19.9)	(5-9.9)	321.2
3821	Mechanical measuring devices.....	19.4	3.8	15.9	17.4	20.3	1,060.4
3831	Optical instruments and lenses.....	9.2	.5-.9)	(10-19.9)	(2-4.9)	(2-4.9)	189.4
3842	Surgical appliances and supplies.....	(2-4.9)	.5-.9)	17.4	3.1	11.2	558.5
3843	Dental equipment and supplies.....	.5-.9)	-	(2-4.9)	-	(1-1.9)	130.4
3851	Ophthalmic goods.....	(Under .5)	-	(1-1.9)	-	(2-4.9)	280.9
3861	Photographic equipment.....	(2-4.9)	.5-.9)	(10-19.9)	(5-9.9)	(2-4.9)	2,496.0
3871	Watches and clocks.....	(Under .5)	6.9	.5-.9)	(2-4.9)	(5-9.9)	550.7
3872	Watchcases.....	-	-	-	-	(Under .5)	28.9
	Miscellaneous industries.....	283.0	1.3	29.0	4.7	-	194.2

FORM

Table 4---EMPLOYEES ((ESTIMATED) AND VALUE OF

Code	Industry	Employees (1,000)	Total value of shipments (million dollars)	Government			
				DOD		NASA	
				Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
	All industries, total.....	4,261.5	142,530.5	1,069.6	24,704.6	192.4	4,925.5
19	Ordnance, except complete guided missiles..	110.7	2,409.7	67.3	1,588.7	.5	6.4
1929	Ammunition, n.e.c.....	33.0	645.8	27.6	535.5	(Under .5)	(1-1.9)
1931	Tanks and tank components.....	9.8	264.0	8.8	232.0	-	.1
1941	Sighting and fire control equipment.....	3.2	65.5	(1-1.9)	(20-49.9)	(Under .5)	(2-4.9)
1951	Small arms, 30 mm. and under.....	13.9	261.2	(2-4.9)	(50-99.9)	-	(Under .5)
1961	Small arms ammunition.....	18.9	465.3	(10-19.9)	(200-499.9)	-	-
1999	Ordnance and accessories, n.e.c.....	31.6	707.7	13.2	388.6	(Under .5)	(1-1.9)
28	Chemicals and allied products.....	88.5	3,512.2	14.0	231.7	.1	8.9
2813	Industrial gases.....	3.4	170.8	(Under .5)	(5-9.9)	-	(5-9.9)
2819	Inorganic chemicals, n.e.c.....	63.3	2,921.7	(.5-.9)	(10-19.9)	-	(Under .5)
2892	Explosives.....	21.7	419.5	13.2	(200-499.9)	-	(.5-.9)
2911	Petroleum refining.....	103.0	18,266.4	3.0	515.1	-	(.5-9.9)
3069	Rubber products, n.e.c.....	118.7	2,557.7	5.9	141.2	-	(1-1.9)
33	Primary metal industries.....	325.0	12,984.8	14.9	492.3	.5	20.5
3323	Steel foundries.....	64.2	1,149.5	(.5-.9)	(10-19.9)	-	(Under .5)
3339	Primary nonferrous metals, n.e.c.....	5.8	204.4	(Under .5)	(5-9.9)	-	2.0
3351	Copper rolling and drawing.....	39.2	2,501.5	1.3	83.8	-	-
3352	Aluminum rolling and drawing.....	60.6	2,911.8	2.4	82.3	-	(Under .5)
3356	Rolling and drawing, n.e.c.....	17.9	739.3	.5	16.6	-	(Under .5)
3357	Nonferrous wiredrawing, etc.....	56.2	3,317.1	2.5	112.2	(Under .5)	(10-19.9)
3361	Aluminum castings.....	26.3	614.2	(.5-.9)	(10-19.9)	-	(Under .5)
3369	Nonferrous castings, n.e.c.....	12.7	260.6	2.2	41.7	-	(.5-9.9)
3391	Iron and steel forgings.....	33.6	1,018.0	2.4	68.3	-	(Under .5)
3392	Nonferrous forgings.....	8.0	267.7	1.6	52.6	(Under .5)	(2-4.9)
34	Fabricated metal products.....	275.5	6,701.0	11.8	270.8	1.5	32.5
3441	Fabricated structural steel.....	58.0	1,527.5	1.4	42.4	.3	5.1
3443	Boiler shop products.....	56.2	1,405.4	2.0	53.6	(Under .5)	(5-9.9)
3451	Screw machine products.....	11.4	224.5	(1-1.9)	(20-49.9)	-	(Under .5)
3452	Bolts, nuts, rivets, and washers.....	53.5	1,311.8	2.6	62.6	(Under .5)	(5-9.9)
3494	Valves and pipe fittings.....	82.3	1,884.1	3.0	60.1	(Under .5)	(5-9.9)
3499	Fabricated metal products, n.e.c.....	13.8	347.4	(1-1.9)	(20-49.9)	(Under .5)	(1-1.9)
35	Machinery, except electrical.....	682.8	19,424.6	47.1	1,130.2	4.9	122.6
3511	Steam engines and turbines.....	34.2	850.9	4.2	121.8	.9	11.8
3519	Internal combustion engines.....	63.9	2,050.6	8.3	234.8	-	(.5-9.9)
3531	Construction machinery.....	110.6	3,534.8	6.9	207.4	.1	1.2
3537	Industrial trucks and tractors.....	19.3	622.5	(1-1.9)	(20-49.9)	-	-
3541	Metal-cutting machine tools.....	63.4	1,477.1	1.5	34.9	-	(1-1.9)
3542	Metal-forming machine tools.....	19.4	497.9	(Under .5)	(2-4.9)	-	(.5-9.9)
3561	Pumps and compressors.....	67.4	1,829.8	3.0	79.5	-	(1-1.9)
3562	Ball and roller bearings.....	57.9	1,317.4	1.3	27.2	-	(Under .5)
3566	Power transmission equipment.....	43.7	1,014.6	1.0	32.2	-	(.5-9.9)
3569	General industry machines, n.e.c.....	24.9	583.2	(.5-.9)	(20-49.9)	.4	5.5
3571	Computing and related machines.....	130.1	4,679.1	15.3	265.9	3.0	96.6
3599	Miscellaneous machinery.....	47.4	965.3	2.8	57.0	(Under .5)	(2-4.9)
36	Electrical machinery.....	1,208.0	24,762.8	276.3	5,423.8	49.3	1,040.8
3611	Electric measuring instruments.....	43.1	812.5	6.6	120.6	1.4	31.5
3612	Transformers.....	37.1	926.3	(.5-.9)	(10-19.9)	-	(Under .5)
3613	Switchgear and switchboards.....	54.8	1,245.6	(1-1.9)	(20-49.9)	-	(2-4.9)
3621	Motors and generators.....	100.0	2,041.5	8.0	159.3	(Under .5)	(5-9.9)
3622	Industrial controls.....	38.1	869.7	.9	21.2	(.5-.9)	(5-9.9)
3643	Current carrying devices.....	31.3	665.9	(.5-.9)	(10-19.9)	-	(.5-9.9)
3644	Noncurrent carrying devices.....	19.0	521.8	(.5-.9)	(2-4.9)	(Under .5)	(2-4.9)
3661	Telephone; telegraph apparatus.....	109.1	2,421.3	5.4	106.8	(Under .5)	(5-9.9)
3662	Radio, TV communications equipment.....	354.7	7,170.5	214.9	4,343.1	42.7	924.2
3671	Electron tubes, receiving type.....	45.1	1,078.6	2.3	37.3	-	(Under .5)
3672	Cathode ray picture tubes.....	19.1	366.6	7.4	133.4	(Under .5)	(2-4.9)
3673	Electron tubes, transmitting.....	78.1	1,054.6	4.0	59.9	(Under .5)	(5-9.9)
3674	Semiconductors.....	193.0	3,244.8	16.1	249.2	2.2	45.6
3679	Electronic components, n.e.c.....	14.9	468.5	(1-1.9)	(20-49.9)	(Under .5)	(1-1.9)
3691	Storage batteries.....	8.7	253.0	2.0	45.1	-	(Under .5)
3692	Primary batteries, dry and wet.....	6.6	167.4	(Under .5)	(5-9.9)	-	(Under .5)
3693	X-ray apparatus and tubes.....	47.1	1,274.5	2.0	46.0	(Under .5)	(2-4.9)
3694	Engine electrical equipment.....	8.4	159.1	-	-	-	-
3699	Electrical products, n.e.c.....						

See footnotes at end of table.

Current Industrial Reports Series MA-175(66)-1

## SHIPMENTS, BY INDUSTRY AND AGENCY: 1966

Code	Industry	Government--Continued				Nongovernment	
		AEC		Other agencies			
		Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
	All industries, total.....	55.9	1,207.6	213.4	4,530.1	2,730.0	87,163.9
19	Ordnance, except complete guided missiles..	17.1	293.9	1.2	12.3	24.4	508.3
1929	Ammunition, n.e.c.....	(1-1.9)	(10-19.9)	(Under .5)	(5-9.9)	3.6	84.0
1931	Tanks and tank components.....	-	-	-	-	.9	31.9
1941	Sighting and fire control equipment.....	-	-	-	(Under .5)	1.3	27.0
1951	Small arms, 30 mm. and under.....	-	(1-1.9)	-	(1-1.9)	9.2	163.5
1961	Small arms ammunition.....	-	-	(.5-.9)	(.5-.9)	7.0	162.0
1999	Ordnance and accessories, n.e.c.....	15.8	274.6	(Under .5)	(2-4.9)	2.1	39.4
28	Chemicals and allied products.....	20.3	604.3	1.2	55.9	52.7	2,611.2
2813	Industrial gases.....	-	-	-	4.4	3.1	149.4
2819	Inorganic chemicals, n.e.c.....	20.3	604.1	62.7	32.2	41.6	2,271.0
2892	Explosives.....	-	.1	(Under .5)	(10-19.9)	7.9	190.7
2911	Petroleum refining.....	-	(Under .5)	(1-1.9)	(100-199.9)	98.5	17,581.7
3069	Rubber products, n.e.c.....	-	(.5-.9)	(2-4.9)	(50-99.9)	108.7	2,336.3
33	Primary metal industries.....	.8	23.8	28.2	955.1	280.4	11,492.9
3323	Steel foundries.....	-	-	(2-4.9)	(50-99.9)	59.4	1,067.7
3339	Primary nonferrous metals, n.e.c.....	.5	14.6	(Under .5)	(10-19.9)	4.5	163.5
3351	Copper rolling and drawing.....	-	.5	2.0	119.3	35.8	2,297.8
3352	Aluminum rolling and drawing.....	-	(Under .5)	6.7	290.0	51.5	2,538.8
3356	Rolling and drawing, n.e.c.....	-	(.5-.9)	3.2	112.4	14.0	609.3
3357	Nonferrous wiredrawing, etc.....	(Under .5)	(5-9.9)	2.7	112.1	50.4	3,073.1
3361	Aluminum castings.....	-	-	(2-4.9)	(20-49.9)	23.4	553.1
3369	Nonferrous castings, n.e.c.....	-	-	(1-1.9)	(10-19.9)	9.1	198.3
3391	Iron and steel forgings.....	-	(Under .5)	3.1	85.7	28.0	863.4
3392	Nonferrous forgings.....	-	(1-1.9)	(2-4.9)	(50-99.9)	3.8	127.5
34	Fabricated metal products.....	4.0	28.3	10.0	241.4	246.9	6,128.0
3441	Fabricated structural steel.....	-	(1-1.9)	(2-4.9)	(50-99.9)	54.1	1,428.4
3443	Boiler shop products.....	3.8	25.2	(1-1.9)	(20-49.9)	48.3	1,284.6
3451	Screw machine products.....	-	-	(.5-.9)	(10-19.9)	9.2	183.7
3452	Bolts, nuts, rivets, and washers.....	-	(.5-.9)	(2-4.9)	(50-99.9)	48.1	1,182.0
3494	Valves and pipe fittings.....	(Under .5)	(1-1.9)	(2-4.9)	(50-99.9)	75.2	1,742.8
3499	Fabricated metal products, n.e.c.....	-	-	(Under .5)	(10-19.9)	11.7	306.3
35	Machinery, except electrical.....	3.7	107.2	23.8	564.2	602.0	17,500.4
3511	Steam engines and turbines.....	(Under .5)	(2-4.9)	(Under .5)	(5-9.9)	28.4	705.2
3519	Internal combustion engines.....	-	(Under .5)	1.4	52.0	54.1	1,763.0
3531	Construction machinery.....	-	.1	2.6	29.1	100.7	3,296.9
3537	Industrial trucks and tractors.....	-	-	(Under .5)	(10-19.9)	17.7	572.3
3541	Metal-cutting machine tools.....	-	(1-1.9)	(2-4.9)	(50-99.9)	59.6	1,380.8
3542	Metal-forming machine tools.....	-	(Under .5)	(Under .5)	(5-9.9)	18.8	484.5
3561	Pumps and compressors.....	(Under .5)	(5-9.9)	1.4	60.0	62.5	1,682.7
3562	Ball and roller bearings.....	-	(Under .5)	4.8	86.3	51.7	1,203.4
3566	Power transmission equipment.....	-	-	(1-1.9)	(20-49.9)	41.3	956.2
3569	General industry machines, n.e.c.....	3.0	77.4	(Under .5)	(10-19.9)	20.0	462.6
3571	Computing and related machines.....	.2	19.4	6.3	170.9	105.1	4,126.0
3599	Miscellaneous machinery.....	-	(Under .5)	2.0	39.6	42.0	866.5
36	Electrical machinery.....	5.8	88.4	82.2	1,405.5	794.6	16,784.4
3611	Electric measuring instruments.....	.3	6.5	5.2	100.4	29.3	553.3
3612	Transformers.....	-	(Under .5)	(1-1.9)	(20-49.9)	35.5	893.8
3613	Switchgear and switchboards.....	-	(Under .5)	2.4	40.0	50.6	1,176.3
3621	Motors and generators.....	(Under .5)	(2-4.9)	(2-4.9)	(50-99.9)	88.0	1,810.4
3622	Industrial controls.....	(Under .5)	(.5-.9)	1.4	32.7	34.5	809.0
3643	Current carrying devices.....	(Under .5)	(.5-.9)	1.3	44.1	29.0	605.8
3644	Noncurrent carrying devices.....	-	-	(Under .5)	(5-9.9)	18.4	506.9
3661	Telephone; telegraph apparatus.....	(Under .5)	(.5-.9)	1.5	29.7	101.6	2,278.4
3662	Radio, TV communications equipment.....	1.2	22.7	15.6	-	79.3	-
3671	Electron tubes, receiving type.....	{ (Under .5)	(2-4.9)	(1-1.9)	(20-49.9)	40.5	1,009.6
3672	Cathode ray picture tubes.....	{ (Under .5)	(2-4.9)	(2-4.9)	(20-49.9)	40.5	1,009.6
3673	Electron tubes, transmitting.....	.8	75.6	2.6	47.4	3.0	165.1
3674	Semiconductors.....	-	(.5-.9)	13.7	188.4	59.8	800.2
3679	Electronic components, n.e.c.....	.9	11.6	28.3	433.6	144.9	2,504.6
3691	Storage batteries.....	-	(1-1.9)	(Under .5)	(10-19.9)	12.6	415.5
3692	Primary batteries, dry and wet.....	-	(Under .5)	-	(2-4.9)	6.6	205.7
3693	X-ray apparatus and tubes.....	(Under .5)	(2-4.9)	(Under .5)	(5-9.9)	4.8	146.4
3694	Engine electrical equipment.....	(Under .5)	(Under .5)	1.8	37.8	43.1	1,188.5
3699	Electrical products, n.e.c.....	(1-1.9)	(10-19.9)	(.5-.9)	(5-9.9)	6.7	135.2

See footnotes at end of table.

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Table 4.--EMPLOYEES (ESTIMATED) AND VALUE OF

Code	Industry	Employees (1,000)	Total value of shipments (million dollars)	Government			
				DOD		NASA	
				Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
37	Transportation equipment <sup>1</sup> .....	1,043.0	24,044.9	571.2	13,389.5	127.4	3,365.7
3713	Truck and bus bodies.....	17.4	357.0	(1-1.9)	(20-49.9)	-	(Under .5)
3715	Truck trailers.....	22.5	664.0	(1-1.9)	(20-49.9)	-	(Under .5)
1925	Complete guided missiles.....	155.8	3,699.7	81.4	1,898.4	62.4	1,627.0
3721	Aircraft.....	353.7	8,964.5	205.3	5,500.1	22.1	768.3
3722	Aircraft engines and parts.....	185.6	4,553.4	104.4	2,600.1	25.4	649.0
3723	Aircraft propellers and parts.....	176.6	3,579.6	101.4	2,115.4	17.0	317.2
3729	Aircraft equipment, n.e.c.....	131.1	2,226.4	75.1	1,215.0	(Under .5)	(2-4.9)
3731	Shipbuilding and repairing.....	256.2	6,574.3	30.8	721.6	1.9	42.4
38	Instruments and related products.....	27.4	540.2	9.6	187.4	(Under .5)	(5-9.9)
3811	Scientific instruments.....	59.8	1,209.1	3.5	71.7	.7	19.4
3821	Mechanical measuring devices.....	13.6	268.1	2.3	49.1	.5	9.2
3831	Optical instruments and lenses.....	26.7	632.2	(1-1.9)	(20-49.9)	(Under .5)	(2-4.9)
3842	Surgical appliances and supplies.....	6.2	138.4	(Under .5)	(2-4.9)	-	(.5-.9)
3843	Dental equipment and supplies.....	18.8	295.8	(.5-.9)	(5-9.9)	-	(Under .5)
3851	Ophthalmic goods.....	72.7	2,858.8	10.1	330.3	(Under .5)	(2-4.9)
3861	Photographic equipment.....	28.0	597.2	1.8	28.0	-	(Under .5)
3871	Watches and clocks.....	2.6	34.1	(.5-.9)	(5-9.9)	-	-
3872	Watchcases.....	49.6	1,311.8	28.1	799.3	6.1	283.0
	Miscellaneous industries.....						

Note: Figures in parentheses represent a range of absolute employment and dollar-value where they would constitute a disclosure of company data. Details may not add to the total due to independent rounding.

- Represents zero.

## EQUIMENTS, BY INDUSTRY AND AGENCY: 1966--Continued

Code	Industry	Government--Continued				Nongovernment	
		AEC		Other agencies			
		Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
37	Transportation equipment <sup>1</sup> .....	2.9	45.1	41.5	835.1	299.5	6,409.3
3713	Truck and bus bodies.....	-	-	(1-1.9)	(20-49.9)	13.9	295.8
3715	Truck trailers.....	-	-	(Under .5)	(2-4.9)	21.0	630.9
1925	Complete guided missiles.....	(.5-.9)	(10-19.9)	(1-1.9)	(20-49.9)	9.4	137.4
3721	Aircraft.....	-	(Under .5)	(2-4.9)	(100-199.9)	121.2	2,572.8
3722	Aircraft engines and parts.....	.8	14.8	8.4	193.2	46.3	1,096.0
3723	Aircraft propellers and parts.....	{ 1.1	18.6	11.6	209.8	45.0	918.5
3729	Aircraft equipment, n.e.c.....		(.5-.9)	13.1	249.4	42.4	757.6
3731	Shipbuilding and repairing.....	-					
38	Instruments and related products.....	.8	13.7	15.1	179.9	207.3	5,616.7
3811	Scientific instruments.....	(Under .5)	(.5-.9)	(1-1.9)	(20-49.9)	15.5	321.2
3821	Mechanical measuring devices.....	.1	3.8	6.1	53.7	49.2	1,060.4
3831	Optical instruments and lenses.....	-	(.5-.9)	(.5-.9)	(10-19.9)	9.7	189.4
3842	Surgical appliances and supplies.....	-	(.5-.9)	3.2	31.9	21.4	558.5
3843	Dental equipment and supplies.....	-	-	(Under .5)	(2-4.9)	5.7	130.4
3851	Ophthalmic goods.....	-	-	(Under .5)	(5-9.9)	17.9	280.9
3861	Photographic equipment.....	-	(.5-.9)	(1-1.9)	(20-49.9)	60.3	2,496.0
3871	Watches and clocks.....	.4	6.9	(.5-.9)	(10-19.9)	25.1	550.7
3872	Watchcases.....	-	-	-	(Under .5)	(2-4.9)	(20-49.9)
	Miscellaneous industries.....	.1	1.3	4.6	33.8	10.4	194.2

n.e.c. Not elsewhere classified.

<sup>1</sup>Total for Major Group 37 includes industry 1925, Complete Guided Missiles.

Table 8.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES  
AND THEIR CONTRACTORS AND SUPPLIERS BY INDUSTRY AND RANGES: 1966

(Ranges are based on total Government shipments)

Code	Industry	Total number of establishments	Establishments reporting--					
			Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
	All industries, total.....	7,216	65	64	128	643	1,268	5,048
19	Ordnance, except complete guided missiles.....	107	4	4	18	32	17	32
1929	Ammunition, n.e.c.....	36	1	2	6	14	5	8
1931	Tanks and tank components.....	12	-	1	3	3	3	2
1941	Sighting and fire control equipment.....	3	-	-	1	2	-	-
1951	Small arms, 30 mm. and under.....	16	-	-	2	1	3	10
1961	Small arms ammunition.....	12	1	-	1	4	2	4
1999	Ordnance and accessories, n.e.c.....	28	2	1	5	8	4	8
28	Chemicals and allied products.....	300	3	4	3	10	20	260
2813	Industrial gases.....	69	-	-	-	2	2	65
2819	Inorganic chemicals, n.e.c.....	189	3	2	2	3	10	169
2892	Explosives.....	42	-	2	1	5	8	26
2911	Petroleum refining.....	220	-	-	6	32	61	121
3069	Rubber products, n.e.c.....	306	-	-	-	10	26	270
33	Primary metal industries.....	822	-	-	12	68	133	609
3323	Steel foundries.....	156	-	-	-	4	16	136
3339	Primary nonferrous metals, n.e.c.....	21	-	-	-	4	1	16
3351	Copper rolling and drawing.....	76	-	-	1	9	21	45
3352	Aluminum rolling and drawing.....	109	-	-	6	12	17	74
3356	Rolling and drawing, n.e.c.....	42	-	-	2	2	9	29
3357	Nonferrous wiredrawing, etc.....	165	-	-	1	14	42	108
3361	Aluminum castings.....	96	-	-	-	5	8	83
3369	Nonferrous castings, n.e.c.....	50	-	-	-	4	6	40
3391	Iron and steel forgings.....	93	-	-	1	8	11	73
3392	Nonferrous forgings.....	14	-	-	1	6	2	5
34	Fabricated metal products.....	969	-	-	-	31	87	851
3441	Fabricated structural steel.....	241	-	-	-	6	16	219
3443	Boiler shop products.....	210	-	-	-	6	18	186
3451	Screw machine products.....	69	-	-	-	2	9	58
3452	Bolts, nuts, rivets, and washers.....	162	-	-	-	9	10	143
3494	Valves and pipe fittings.....	214	-	-	-	5	24	185
3499	Fabricated metal products, n.e.c.....	73	-	-	-	3	10	60
35	Machinery, except electrical.....	1,132	-	4	9	63	207	849
3511	Steam engines and turbines.....	18	-	1	1	2	5	9
3519	Internal combustion engines.....	55	-	1	3	7	14	30
3531	Construction machinery.....	173	-	-	1	10	29	133
3537	Industrial trucks and tractors.....	44	-	-	-	4	9	31
3541	Metal-cutting machine tools.....	118	-	-	-	4	20	94
3542	Metal-forming machine tools.....	50	-	-	-	-	3	47
3561	Pumps and compressors.....	147	-	-	1	4	24	118
3562	Ball and roller bearings.....	74	-	-	-	5	19	50
3566	Power transmission equipment.....	106	-	-	-	1	14	91
3569	General industry machines, n.e.c.....	96	-	-	1	4	12	79
3571	Computing and related machines.....	96	-	2	2	18	35	39
3599	Miscellaneous machinery.....	155	-	-	-	4	23	128
36	Electrical machinery.....	2,055	10	22	39	210	427	1,347
3611	Electric measuring instruments.....	113	-	-	2	15	28	68
3612	Transformers.....	53	-	-	-	1	9	43
3613	Switchgear and switchboards.....	127	-	-	-	3	19	105
3621	Motors and generators.....	192	-	-	-	15	35	142
3622	Industrial controls.....	53	-	-	-	3	7	43
3643	Current carrying devices.....	85	-	-	-	2	9	74
3644	Noncurrent carrying devices.....	56	-	-	-	-	4	52
3661	Telephone; telegraph apparatus.....	44	-	-	1	7	12	24
3662	Radio, TV communications equipment.....	390	10	21	32	89	93	145
3671	Electron tubes, receiving type.....	26	-	-	-	5	4	17
3672	Cathode ray picture tubes.....	-	-	-	1	12	12	12
3673	Electron tubes, transmitting.....	37	-	-	1	2	8	27
3674	Semiconductors.....	64	-	1	2	8	37	134
3679	Electronic components, n.e.c.....	613	-	-	1	37	134	441
3691	Storage batteries.....	64	-	-	-	2	12	50
3692	Primary batteries, dry and wet.....	21	-	-	-	3	7	11
3693	X-ray apparatus and tubes.....	15	-	-	-	1	5	9
3694	Engine electrical equipment.....	65	-	-	-	6	9	50
3699	Electrical products, n.e.c.....	37	-	-	-	1	2	34

See footnotes at end of table

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Table 8.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS BY INDUSTRY AND RANGES: 1966--Continued

(Ranges are based on total Government shipments)

Code	Industry	Total number of establishments	Establishments reporting--					
			Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
37	Transportation equipment <sup>1</sup> .....	749	44	26	32	145	187	315
3713	Truck and bus bodies.....	62	-	-	-	5	9	48
3715	Truck trailers.....	75	-	-	-	2	7	66
1925	Complete guided missiles.....	30	10	5	8	5	1	1
3721	Aircraft.....	49	14	3	4	8	5	15
3722	Aircraft engines and parts.....	122	9	7	9	32	33	32
3723	Aircraft propellers and parts.....	7	1	-	-	2	1	3
3729	Aircraft equipment, n.e.c.....	292	6	7	6	69	104	100
3731	Ship building and repairing.....	112	4	4	5	22	27	50
38	Instruments and related products.....	513	1	3	4	30	94	381
3811	Scientific instruments.....	88	-	1	1	10	10	66
3821	Mechanical measuring devices.....	131	-	-	-	5	34	92
3831	Optical instruments and lenses.....	38	-	-	1	3	13	21
3842	Surgical appliances and supplies.....	70	-	-	-	3	17	50
3843	Dental equipment and supplies.....	25	-	-	-	-	2	23
3851	Ophthalmic goods.....	41	-	-	-	1	2	38
3861	Photographic equipment.....	74	1	2	2	5	12	52
3871	Watches and clocks.....	38	-	-	-	3	2	33
3872	Watchcases.....	8	-	-	-	-	2	6
	Miscellaneous industries.....	43	3	1	5	12	9	13

- Represents zero.

n.e.c. Not elsewhere classified.

<sup>1</sup>Total for Major Group 37 includes industry 1925, Complete Guided Missiles.

Table 9.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS BY GEOGRAPHIC AREAS AND RANGES: 1966

(Ranges are based on total Government shipments)

Division, State, and standard metropolitan statistical area	Total number of establishments	Establishments reporting--					
		Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
United States, total.....	7,216	65	64	128	643	1,268	5,048
NEW ENGLAND							
Maine.....	14	-	-	1	2	2	9
Portland.....	4	-	-	-	1	1	2
New Hampshire.....	42	-	-	1	3	12	26
Vermont.....	23	-	-	1	3	4	15
Massachusetts.....	326	3	3	7	34	82	197
Boston.....	185	3	1	4	21	54	102
Brockton.....	9	-	-	-	-	-	9
Lawrence-Haverhill, Mass.-N.H.....	9	-	1	-	-	3	5
Lowell.....	7	-	-	1	1	1	4
New Bedford.....	8	-	-	-	1	3	4
Pittsfield.....	4	-	1	-	1	1	1
Providence-Pawtucket-Warwick, R.I.-Mass. (See Rhode Island)	4	-	1	-	1	1	1
Springfield-Chicopee-Holyoke, Mass.-Conn.....	31	-	-	-	3	7	21
Worcester.....	26	-	-	-	2	7	17
Rhode Island.....	67	-	-	1	5	10	51
Providence-Pawtucket-Warwick, R.I.-Mass.....	74	-	-	-	7	11	56
Connecticut.....	285	5	1	6	24	67	182
Bridgeport.....	43	2	-	-	5	7	29
Hartford.....	51	2	-	3	4	10	32
Meriden.....	4	-	-	-	-	3	1
New Britain.....	17	-	-	1	1	3	12
New Haven.....	32	-	1	-	2	7	22
New London-Groton-Norwich.....	6	1	-	-	-	1	4
Norwalk.....	19	-	-	2	1	6	10
Stamford.....	13	-	-	-	4	2	7
Waterbury.....	28	-	-	-	4	12	12

See footnotes at end of table.

## Part II

Table 1.--VALUE OF SHIPMENTS AND RECEIPTS OF DEFENSE-ORIENTED INDUSTRIES--SUMMARY STATISTICS,  
BY AGENCY: 1965

Millions of dollars. The U.S. total of \$106.0 billion in tables 1, 2, and 3 represents the universe of plants with 100 or more employees, with smaller plants inflated in accordance with their sample weights in the 1965 Annual Survey of Manufactures. Data in other tables are not inflated, i.e., they represent reported data only.

Item	1965
Annual Survey of Manufactures (total for industries covered on MA-175)...	121,026.6
Shipments from MA-175 Survey, total <sup>1</sup> .....	106,174.9
Government shipments, total.....	28,972.6
Prime contract shipments <sup>2</sup> , total.....	21,576.1
Department of Defense (DOD).....	15,923.2
National Aeronautics and Space Agency (NASA).....	3,662.2
Atomic Energy Commission (AEC).....	1,065.9
Other agencies.....	924.9
Subcontract shipments <sup>2</sup> , total.....	7,396.5
Agency known, total.....	5,016.7
DOD.....	3,644.7
NASA.....	1,075.2
AEC.....	112.4
Other agencies.....	184.4
Agency not known, total.....	2,379.4
DOD, NASA, or AEC.....	1,028.9
Other agencies.....	1,350.5
Other than government shipments.....	77,202.3

<sup>1</sup>Includes value of shipments of all establishments included on the mailing panel for the industries covered.

<sup>2</sup>See text for limitations applicable to the distinction of prime versus subcontract.

Table 2--EMPLOYEES, COST OF MATERIALS, VALUE ADDED, AND VALUE OF SHIPMENTS AND RECEIPTS, BY INDUSTRY GROUPS: 1965

1965 Annual Survey of Manufactures compared to MA-175 Survey. The U.S. total of \$106.0 billion in tables 1, 2, and 3 represents the universe of plants with 100 or more employees with smaller plants inflated in accordance with their sample weights in the 1965 Annual Survey of Manufactures.

Industry group <sup>1</sup>	Number of employees		Cost of materials		Value added by manufacturer, adjusted		Value of shipments and receipts	
	Annual survey of manufactures (1,000)	MA-175 (1,000)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)	Annual survey of manufactures (million dollars)	MA-175 (million dollars)
TOTAL.....	4,459.6	3,858.7	59,834.4	52,964.5	61,293.8	54,577.1	121,026.6	106,174.9
Turbines, construction machinery, machine tools, and computers and related products.	371.8	330.9	4,486.4	4,121.3	5,763.0	5,260.9	9,883.5	8,989.1
Communication equipment.....	453.4	428.3	3,521.1	3,321.4	5,750.5	5,450.2	9,127.5	8,677.4
Electronic components and accessories.....	317.7	286.7	1,813.1	1,669.6	3,320.9	3,033.7	5,041.0	4,607.6
Aerospace industries.....	781.5	763.8	7,271.1	7,105.8	10,616.4	10,387.4	17,651.4	17,296.4
Ship building and repairing and ordnance <sup>2</sup> ..	225.3	201.9	1,611.9	1,531.4	2,160.2	2,008.2	3,777.6	3,516.2
Scientific instruments, mechanical measuring devices, optical instruments and photographic equipment.....	186.3	157.0	1,687.9	1,450.1	3,336.7	2,957.1	4,898.6	4,298.8
Miscellaneous industries <sup>3</sup> .....	(X)	36.5	(X)	248.0	(X)	817.5	(X)	1,065.5
Surgical and dental equipment, ophthalmic goods, and watches and watchcases.....	94.5	76.5	756.5	612.9	1,114.7	940.4	1,850.3	1,523.6
Other machinery.....	449.5	304.9	4,148.7	3,249.9	5,934.1	4,384.8	9,917.9	7,459.4
Electric transmission and industrial apparatus; wiring devices; and miscellaneous electrical equipment.....	434.8	376.5	4,187.3	3,260.3	5,688.1	5,087.3	9,655.7	8,447.3
Selected fabricated metal products.....	392.0	260.9	4,466.5	2,947.2	4,837.9	3,238.6	9,073.7	6,013.2
Truck bodies and truck trailers.....	51.1	36.2	718.2	555.8	533.1	391.9	1,247.6	941.0
Selected chemicals and allied products.....	101.9	76.8	2,076.8	1,471.5	2,485.0	1,804.2	4,597.5	3,253.8
Petroleum refineries.....	109.8	102.7	13,952.8	13,496.1	3,519.8	3,374.3	19,067.4	16,860.7
Fabricated rubber products, n.e.c.....	139.2	116.4	1,333.3	1,081.7	1,593.7	1,333.1	2,918.6	2,406.1
Selected primary metal industries.....	350.8	302.7	7,802.7	6,841.5	4,639.7	4,107.5	12,318.3	10,818.8

Note: The figures shown for the MA-175 survey differ from those of the 1965 Annual Survey of Manufactures because the MA-175 data exclude establishments with less than 100 employees. The two exceptions are Industries 3679 and 3729.

<sup>1</sup>See appendix A for a description of industry groups.

<sup>2</sup>Excludes SIC industry 1925 Guided Missiles and Space Vehicles. This industry is included in Aerospace.

<sup>3</sup>Includes figures for nonmanufacturing facilities of the manufacturing companies canvassed.

Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS

Value figures in millions of dollars. The U.S. total of \$106.0 billion in tables 1, 2, and 3 represents the universe of plants with 100 or more employees in 1967, while the U.S. total of \$105.9 billion, in table 4, aggregating to a U.S. total of \$105.9 billion,

Code	Industry	Employees (1,000)	Value added by manufac- ture	Total value of shipments and receipts reported	Government shipments				
					Total	Prime contract	Sub- contract	To DOD	
								Prime contract	Sub- contract
	All industries, total.....	3,858.7	54,577.1	106,174.9	28,972.6	21,516.1	7,396.5	15,923.2	3,644.7
19	Ordnance, except complete guided missiles.	78.6	870.9	1,556.6	1,161.6	1,104.1	57.5	812.9	42.7
1929	Ammunition, n.e.c.....	21.8	197.3	398.7	362.3	346.5	15.8	334.0	8.9
1931	Tanks and tank components.....	7.3	101.9	219.7	205.2	189.1	16.1	189.1	(10-19.9)
1941	Sighting and fire control equipment.....	3.5	49.5	85.7	(50-99.9)	(50-99.9)	(2-4.9)	(50-99.9)	(2-4.9)
1951	Small arms, 30 mm. and under.....	10.1	114.1	159.1	24.6	21.8	2.8	21.5	(1-1.9)
1961	Small arms ammunition.....	10.1	123.7	231.6	(50-99.9)	(50-99.9)	(Under .5)	(50-99.9)	(Under .5)
1999	Ordnance and accessories, n.e.c.....	25.8	284.4	461.8	398.7	380.9	17.8	119.9	11.9
28	Chemicals and allied products.....	76.8	1,804.2	3,253.8	762.3	715.3	47.0	87.9	16.4
2813	Industrial gases.....	3.0	88.9	145.0	15.3	(10-19.9)	(2-4.9)	(2-4.9)	(10-19.9)
2819	Inorganic chemicals, n.e.c.....	60.8	1,556.9	2,847.1	638.7	(500-999.9)	(20-49.9)	(.5-.9)	(5-9.9)
2892	Explosives.....	13.0	158.4	261.7	108.3	88.4	19.9	84.6	(5-9.9)
2911	Petroleum refining.....	102.7	3,374.3	16,860.7	636.3	534.5	101.8	435.1	45.1
3069	Rubber products, n.e.c.....	116.4	1,333.1	2,406.1	163.3	77.2	86.1	73.2	29.2
33	Primary metal industries.....	302.7	4,107.5	10,818.8	813.9	105.6	708.3	79.6	145.5
3323	Steel foundries.....	62.3	698.5	1,051.3	59.7	.5	59.2	(Under .5)	(10-19.9)
3339	Primary nonferrous metals, n.e.c.....	4.7	76.0	160.0	30.0	3.2	26.8	(Under .5)	(5-9.9)
3351	Copper rolling and drawing.....	38.0	572.2	2,013.5	49.4	3.6	45.8	3.6	16.2
3352	Aluminum rolling and drawing.....	54.3	661.7	2,440.9	175.9	31.2	144.7	29.6	-
3356	Rolling and drawing, n.e.c.....	16.0	254.1	638.8	107.3	(20-49.9)	(50-99.9)	(10-19.9)	(1-1.9)
3357	Nonferrous wiredrawing, etc.....	53.6	930.9	2,649.1	130.0	37.2	92.8	28.0	20.3
3361	Aluminum castings.....	24.2	281.6	547.5	41.5	(1-1.9)	(20-49.9)	(1-1.9)	(2-4.9)
3369	Nonferrous castings, n.e.c.....	11.0	116.0	215.3	32.7	-	32.7	-	16.6
3391	Iron and steel forgings.....	31.9	420.0	908.0	94.7	(Under .5)	(50-99.9)	(2-4.9)	(20-49.9)
3392	Nonferrous forgings.....	6.7	96.5	194.4	92.7	(2-4.9)	(50-99.9)	(2-4.9)	(20-49.9)
34	Fabricated metal products.....	260.9	3,238.6	6,013.2	395.4	99.6	295.8	55.8	90.3
3441	Fabricated structural steel.....	57.9	635.5	1,408.2	71.6	17.6	54.0	13.6	10.3
3443	Boiler shop products.....	54.2	602.6	1,261.0	105.3	36.0	69.3	12.7	18.3
3451	Screw machine products.....	10.1	114.8	181.8	23.3	(2-4.9)	(10-19.9)	(.5-.9)	(5-9.9)
3452	Bolts, nuts, rivets, and washers.....	50.3	689.0	1,169.7	73.7	14.3	59.4	9.4	26.7
3494	Valves and pipe fittings.....	76.0	1,032.6	1,669.3	94.2	17.0	77.2	9.2	19.7
3499	Fabricated metal products, n.e.c.....	12.4	164.1	323.2	27.3	(10-19.9)	(10-19.9)	(10-19.9)	(5-9.9)
35	Machinery, except electrical.....	635.8	9,645.7	16,448.5	1,347.1	671.0	676.1	444.3	324.2
3511	Steam engines and turbines.....	34.4	475.3	788.7	137.4	59.7	77.7	52.4	56.1
3519	Internal combustion engines.....	57.9	904.1	1,742.8	143.0	82.5	60.5	78.2	48.0
3531	Construction machinery.....	111.2	1,672.1	3,332.1	139.6	75.2	64.4	55.0	43.7
3537	Industrial trucks and tractors.....	16.5	268.8	511.0	54.3	47.2	7.1	41.5	1.8
3541	Metal-cutting machine tools.....	56.4	818.1	1,257.2	53.9	20.9	33.0	7.6	12.3
3542	Metal-forming machine tools.....	17.8	254.8	436.5	11.7	(1-1.9)	(10-19.9)	(Under .5)	(1-1.9)
3561	Pumps and compressors.....	64.8	940.4	1,636.2	101.5	35.6	65.9	33.1	30.3
3562	Ball and roller bearings.....	55.2	764.2	1,229.8	82.6	(5-9.9)	(50-99.9)	(5-9.9)	(5-9.9)
3566	Power transmission equipment.....	42.4	592.0	931.1	42.0	7.7	34.3	6.7	13.2
3569	General industry machines, n.e.c.....	24.7	337.3	526.7	116.6	83.3	33.3	(10-19.9)	(5-9.9)
3571	Computing and related machines.....	111.1	2,040.6	3,174.6	396.8	244.7	152.1	145.9	80.1
3599	Miscellaneous machinery.....	43.4	578.0	881.8	67.9	5.2	62.7	4.8	20.8
36	Electrical machinery.....	1,091.5	13,571.3	21,732.3	6,873.7	4,275.6	2,598.1	3,486.7	1,185.1
3611	Electric measuring instruments.....	38.7	494.8	719.7	230.2	126.1	104.1	92.0	23.9
3612	Transformers.....	34.5	482.0	850.8	48.9	9.6	39.3	(2-4.9)	(.5-.9)
3613	Switchgear and switchboards.....	50.7	710.1	1,133.1	48.1	14.4	33.7	(5-9.9)	(10-19.9)
3621	Motors and generators.....	97.0	1,134.6	1,941.7	227.0	117.5	109.5	107.1	51.7
3622	Industrial controls.....	33.4	520.5	739.0	46.3	8.3	38.0	7.6	10.5
3643	Current carrying devices.....	31.2	371.1	606.7	38.9	7.3	31.6	(2-4.9)	(2-4.9)
3644	Noncurrent carrying devices.....	18.1	275.4	494.9	32.2	(20-49.9)	(5-9.9)	(10-19.9)	-
3661	Telephone; telegraph apparatus.....	100.8	1,349.0	2,238.9	116.2	89.7	26.5	69.1	9.6
3662	Radio, TV communications equipment.....	327.5	4,101.2	6,438.5	4,954.4	3,514.0	1,440.4	2,927.1	923.4
3671	Electron tubes, receiving type.....	35.2	486.0	742.9	89.2	56.4	32.8	32.6	(.5-.9)
3672	Cathode ray picture tubes.....	16.4	199.3	286.7	155.3	80.2	75.1	63.7	31.3
3673	Electron tubes, transmitting.....	65.7	656.3	879.2	193.6	29.7	163.9	24.8	26.1
3674	Semiconductors.....	169.4	1,692.1	2,698.8	528.5	107.7	420.8	79.2	69.6
3679	Electronic components, n.e.c.....	13.8	217.3	447.3	46.2	25.0	21.2	23.9	(5-9.9)
3691	Storage batteries.....	7.6	130.6	216.3	29.6	23.7	5.9	21.7	(1-1.9)
3692	Primary batteries, dry and wet.....	5.3	83.3	144.0	18.4	7.0	11.4	(5-9.9)	(1-1.9)
3693	X-ray apparatus and tubes.....	39.2	595.8	1,026.9	51.8	18.4	33.4	6.8	12.2
3694	Engine electrical equipment.....	7.0	71.9	126.9	18.9	(10-19.9)	(1-1.9)	-	-
3699	Electrical products, n.e.c.....								

See footnotes at end of table.

SHIPMENTS  
AND RECEIPTS, BY INDUSTRY AND AGENCY: 1965

or more employees with smaller plants inflated in accordance with their sample weights in the 1965 Annual Survey of Manufactures. Data in are not inflated, i.e., they represent reported data only.

	Code	Industry	Government shipments--Continued					Nongovernment shipments
			To NASA	To AEC	To other known agencies	Agency not specifically known (either DOD, NASA, or AEC)	Other agencies not specifically known	
1,644.7		All industries, total.....	4,737.8	1,178.3	1,109.3	1,028.9	1,350.5	77,202.3
42.7	19	Ordnance, except complete guided missiles.	10.2	271.8	20.6	.7	2.7	395.0
8.9	1929	Ammunition, n.e.c.....	(.5-.9)	15.7	2.7	-	(Under .5)	36.4
0-19.9	1931	Tanks and tank components.....	-	-	-	-	(Under .5)	14.5
(2-4.9)	1941	Sighting and fire control equipment.....	(5-9.9)	-	(10-19.9)	-	-	(10-19.9)
(1-1.9)	1951	Small arms, 30 mm. and under.....	-	-	(Under .5)	-	(1-1.9)	134.5
der .5)	1961	Small arms ammunition.....	-	-	(1-1.9)	(Under .5)	-	(100-199.9)
11.9	1999	Ordnance and accessories, n.e.c.....	4.0	256.1	(5-9.9)	(.5-.9)	(1-1.9)	63.1
16.4	28	Chemicals and allied products.....	13.1	607.6	9.8	3.6	23.9	2,491.5
0-19.9	2813	Industrial gases.....	(5-9.9)	(1-1.9)	-	-	(2-4.9)	129.7
(5-9.9)	2819	Inorganic chemicals, n.e.c.....	(5-9.9)	606.5	(5-9.9)	(2-4.9)	(5-9.9)	2,208.4
(5-9.9)	2892	Explosives.....	(Under .5)	(Under .5)	(2-4.9)	(.5-.9)	11.0	153.4
45.1	2911	Petroleum refining.....	(Under .5)	(.5-.9)	108.9	(10-19.9)	(20-49.9)	16,224.4
29.2	3069	Rubber products, n.e.c.....	(.5-.9)	(Under .5)	(10-19.9)	(2-4.9)	(20-49.9)	2,242.8
145.5	33	Primary metal industries.....	16.1	16.5	43.6	185.8	326.8	10,004.9
0-19.9	3323	Steel foundries.....	-	-	(5-9.9)	(2-4.9)	39.5	991.6
(5-9.9)	3339	Primary nonferrous metals, n.e.c.....	2.0	12.0	(Under .5)	(5-9.9)	(Under .5)	130.0
16.2	3351	Copper rolling and drawing.....	(Under .5)	-	(Under .5)	16.8	12.4	1,964.1
-	3352	Aluminum rolling and drawing.....	(Under .5)	-	3.6	(20-49.9)	(100-199.9)	2,265.0
(1-1.9)	3356	Rolling and drawing, n.e.c.....	(1-1.9)	(Under .5)	(10-19.9)	(20-49.9)	(20-49.9)	531.5
20.3	3357	Nonferrous wiredrawing, etc.....	(5-9.9)	(2-4.9)	15.0	(5-9.9)	47.9	2,519.1
(2-4.9)	3361	Aluminum castings.....	(Under .5)	-	(2-4.9)	(10-19.9)	(10-19.9)	506.0
16.6	3369	Nonferrous castings, n.e.c.....	-	-	-	7.6	8.5	182.6
0-49.9	3391	Iron and steel forgings.....	-	(Under .5)	(20-49.9)	(10-19.9)	(10-19.9)	813.3
0-49.9	3392	Nonferrous forgings.....	(2-4.9)	(.5-.9)	(Under .5)	(2-4.9)	(20-49.9)	101.7
90.3	34	Fabricated metal products.....	44.0	18.7	31.6	48.0	107.0	5,617.8
10.3	3441	Fabricated structural steel.....	7.4	-	(5-9.9)	(Under .5)	31.9	1,336.6
18.3	3443	Boiler shop products.....	(10-19.9)	(10-19.9)	5.3	(10-19.9)	17.0	1,155.7
(5-9.9)	3451	Screw machine products.....	(Under .5)	-	(2-4.9)	(Under .5)	(10-19.9)	158.5
26.7	3452	Bolts, nuts, rivets, and washers.....	6.9	-	(5-9.9)	(5-9.9)	15.9	1,096.0
19.7	3494	Valves and pipe fittings.....	(5-9.9)	(1-1.9)	(5-9.9)	23.4	24.6	1,575.1
(5-9.9)	3499	Fabricated metal products, n.e.c.....	(2-4.9)	-	(.5-.9)	-	(5-9.9)	295.9
324.2	35	Machinery, except electrical.....	87.1	93.2	107.6	104.4	186.3	15,101.4
56.1	3511	Steam engines and turbines.....	13.3	(2-4.9)	(2-4.9)	(.5-.9)	7.9	651.3
48.0	3519	Internal combustion engines.....	(Under .5)	(Under .5)	(5-9.9)	(2-4.9)	(5-9.9)	1,599.8
43.7	3531	Construction machinery.....	3.7	(5-9.9)	10.7	(1-1.9)	18.5	3,192.5
1.8	3537	Industrial trucks and tractors.....	-	-	(5-9.9)	(.5-.9)	(2-4.9)	456.7
12.3	3541	Metal-cutting machine tools.....	1.4	1.3	(10-19.9)	(1-1.9)	17.0	1,203.3
(1-1.9)	3542	Metal-forming machine tools.....	-	-	(1-1.9)	-	(5-9.9)	424.8
30.3	3561	Pumps and compressors.....	(2-4.9)	(Under .5)	(2-4.9)	13.8	18.9	1,534.7
(5-9.9)	3562	Ball and roller bearings.....	(.5-.9)	-	(2-4.9)	40.4	21.9	1,147.4
13.2	3566	Power transmission equipment.....	(Under .5)	-	(2-4.9)	(1-1.9)	15.9	889.1
(5-9.9)	3569	General industry machines, n.e.c.....	2.2	77.7	(5-9.9)	(2-4.9)	(5-9.9)	410.1
80.1	3571	Computing and related machines.....	61.3	(2-4.9)	47.1	28.9	(20-49.9)	2,777.8
20.8	3599	Miscellaneous machinery.....	(1-1.9)	-	(2-4.9)	10.2	28.9	813.9
,185.1	36	Electrical machinery.....	945.9	80.0	280.8	454.2	441.0	14,858.6
23.9	3611	Electric measuring instruments.....	32.9	4.4	10.5	40.0	26.5	489.5
(5-9.9)	3612	Transformers.....	(Under .5)	(Under .5)	(5-9.9)	(20-49.9)	12.0	801.9
0-19.9	3613	Switchgear and switchboards.....	(.5-.9)	(Under .5)	9.7	(2-4.9)	16.9	1,085.0
51.7	3621	Motors and generators.....	(5-9.9)	(2-4.9)	22.7	16.6	20.2	1,714.7
10.5	3622	Industrial controls.....	(5-9.9)	(.5-.9)	(1-1.9)	(5-9.9)	10.2	692.7
(2-4.9)	3643	Current carrying devices.....	(.5-.9)	(.5-.9)	(2-4.9)	10.4	15.4	567.8
9.6	3644	Noncurrent carrying devices.....	(5-9.9)	(Under .5)	(5-9.9)	-	(5-9.9)	462.7
923.4	3661	Telephone; telegraph apparatus.....	4.9	(.5-.9)	18.0	3.7	(10-19.9)	2,122.7
(.5-.9)	3662	Radio, TV communications equipment.....	833.8	16.1	129.2	86.0	38.8	1,484.1
31.3	3671	Electron tubes, receiving type.....	(1-1.9)	(5-9.9)	(10-19.9)	27.7	(2-4.9)	653.7
26.1	3672	Cathode ray picture tubes.....	-	-	-	-	-	-
69.6	3673	Electron tubes, transmitting.....	(2-4.9)	(10-19.9)	15.2	17.1	12.3	131.4
(5-9.9)	3674	Semiconductors.....	3.7	(Under .5)	(2-4.9)	47.6	87.4	685.6
3679	3679	Electronic components, n.e.c.....	36.3	15.4	19.6	154.2	154.2	2,170.3
3691	3691	Storage batteries.....	(5-9.9)	(Under .5)	(.5-.9)	2.6	6.1	401.1
(1-1.9)	3692	Primary batteries, dry and wet.....	-	(2-4.9)	(2-4.9)	(Under .5)	(2-4.9)	186.7
(1-1.9)	3693	X-ray apparatus and tubes.....	(Under .5)	(2-4.9)	(1-1.9)	(1-1.9)	(2-4.9)	125.6
(1-1.9)	3694	Engine electrical equipment.....	(2-4.9)	(Under .5)	(10-19.9)	6.4	12.6	975.1
12.2	3699	Electrical products, n.e.c.....	-	(10-19.9)	(2-4.9)	(.5-.9)	(1-1.9)	108.0

See footnotes at end of table.

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Table 3.--EMPLOYEES, VALUE ADDED, AND VALUE OF SHIPMENTS

Value figures in millions of dollars. The U.S. total of \$106.0 billion in tables 1, 2, and 3 represents the universe of plants with 100 table 4, aggregating to a U.S. total of \$105.9 billion,

Code	Industry	Employees (1,000)	Value added by manufac- ture	Total value of shipments and receipts reported	Government shipments				
					Total	Prime contract	Sub- contract	To DOD	
								Prime contract	Sub- contract
37	Transportation equipment <sup>1</sup> .....	923.3	11,916.6	20,197.0	15,084.9	12,696.1	2,388.8	9,582.3	1,504.3
3713	Truck and bus bodies.....	16.4	162.8	337.4	70.0	34.7	35.3	33.6	11.4
3715	Truck trailers.....	19.8	229.1	603.6	22.1	13.4	8.7	(5-9.9)	(2-4.9)
3721	Aircraft.....	291.4	3,833.9	7,092.1	5,229.1	4,969.5	259.6	4,329.3	136.9
1925	Complete guided missiles.....	139.4	2,128.6	3,127.9	3,043.7	2,727.6	316.1	1,345.8	172.3
3722	Aircraft engines and parts.....	176.8	2,440.4	4,075.6	3,149.9	2,563.6	586.3	1,856.1	392.0
3723	Aircraft propellers and parts.....	156.2	1,984.5	3,000.8	2,285.6	1,185.4	1,100.2	1,061.1	728.4
3729	Aircraft equipment, n.e.c.....	123.3	1,137.3	1,959.6	1,284.5	1,201.9	82.6	946.9	58.6
3731	Ship building and repairing.....								
38	Instruments and related products.....	233.5	3,897.4	5,822.4	784.4	496.4	288.0	345.8	115.9
3811	Scientific instruments.....	21.7	264.3	421.2	167.1	89.9	77.2	81.5	43.3
3821	Mechanical measuring devices.....	58.4	858.8	1,273.3	123.4	58.7	64.7	32.5	12.9
3831	Optical instruments and lenses.....	12.0	159.3	229.4	80.4	33.2	47.2	24.5	25.5
3842	Surgical appliances and supplies.....	23.7	341.7	552.8	45.4	33.3	12.1	22.5	(1.5-.9)
3843	Dental equipment and supplies.....	5.4	80.0	117.3	12.0	10.4	1.6	(5-9.9)	-
3851	Ophthalmic goods.....	18.3	182.3	262.3	(10-19.9)	(5-9.9)	(5-9.9)	(5-9.9)	(2-4.9)
3861	Photographic equipment.....	64.9	1,674.7	2,374.9	309.5	255.5	54.0	163.6	23.2
3871	Watches and clocks.....	26.7	318.1	564.0	32.2	6.3	25.9	6.1	8.3
3872	Watchcases.....	2.4	18.2	27.2	(2-4.9)	(2-4.9)	(Under .5)	(2-4.9)	(Under .5)
	Miscellaneous industries.....	36.5	817.5	1,065.5	949.7	800.7	149.0	519.6	146.0

Note: Figures in parentheses represent a range in place of absolute employment and dollar-value figures where they would constitute a disclosure of company data.

- Represents zero.

n.e.c. Not elsewhere classified.

<sup>1</sup>Total for Major Group 37 includes industry 1925, Complete Guided Missiles.

## AND RECEIPTS, BY INDUSTRY AND AGENCY: 1965--Continued

or more employees with smaller plants inflated in accordance with their sample weights in the 1965 Annual Survey of Manufactures. Data in are not inflated, i.e., they represent reported data only.

Code	Industry	Government shipments--Continued					Nongovernment shipments
		To NASA	To AEC	To other known agencies	Agency not specifically known (either DOD, NASA, or AEC)	Other agencies not specifically known	
04.3	37 Transportation equipment.....	3,296.9	46.8	372.0	171.7	110.9	5,112.1
11.4	3713 Truck and bus bodies.....	(.5-.9)	-	(5-9.9)	(5-9.9)	(5-9.9)	267.4
2-4.9)	3715 Truck trailers.....	(Under .5)	(Under .5)	(2-4.9)	-	3.7	581.5
136.9	3721 Aircraft.....	712.8	(.5-.9)	34.3	(10-19.9)	(2-4.9)	1,863.0
172.3	1925 Complete guided missiles.....	1,502.6	(5-9.9)	16.3	(.5-.9)	(Under .5)	84.2
392.0	3722 Aircraft engines and parts.....	785.0	28.5	36.0	21.3	31.0	925.7
728.4	3723 Aircraft propellers and parts.....	289.5	11.7	13.6	121.8	59.5	715.2
58.6	3729 Aircraft equipment, n.e.c.....	(5-9.9)	(.5-.9)	258.1	(5-9.9)	(5-9.9)	675.1
115.9	3731 Ship building and repairing.....	46.6	42.8	111.9	45.5	75.9	5,038.0
43.3	38 Instruments and related products.....	13.2	(.5-.9)	3.7	16.6	(5-9.9)	254.1
12.9	3811 Scientific instruments.....	15.3	11.0	15.6	13.8	22.3	1,149.9
25.5	3821 Mechanical measuring devices.....	9.4	(1-1.9)	13.2	(2-4.9)	(2-4.9)	149.0
.5-.9)	3831 Optical instruments and lenses.....	(2-4.9)	(Under .5)	(5-9.9)	(.5-.9)	10.8	507.4
-	3842 Surgical appliances and supplies.....	(1-1.9)	-	(2-4.9)	-	(1-1.9)	105.3
2-4.9)	3843 Dental equipment and supplies.....	(Under .5)	-	(.5-.9)	-	(2-4.9)	(200-499.9)
23.2	3851 Ophthalmic goods.....	4.9	(20-49.9)	68.3	(5-9.9)	20.2	2,065.4
8.3	3861 Photographic equipment.....	(Under .5)	8.2	-	(2-4.9)	6.7	531.8
er .5)	3871 Watches and clocks.....	-	-	-	-	-	(20-49.9)
146.0	3872 Watchcases.....	276.9	(Under .5)	(5-9.9)	-	-	115.8
	Miscellaneous industries.....						

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Table 4.—EMPLOYEES (ESTIMATED) AND VALUE OF

Code	Industry	Employees (1,000)	Total value of shipments (million dollars)	Government			
				DOD		NASA	
				Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
	All industries, total.....	3,854.1	106,087.5	902.9	19,565.9	199.8	4,736.7
19	Ordnance, except complete guided missiles..	78.6	1,556.6	39.4	855.7	.4	10.2
1929	Ammunition, n.e.c.....	21.8	398.7	17.9	342.9	-	(.5-.9)
1931	Tanks and tank components.....	7.3	219.7	6.8	204.9	-	-
1941	Sighting and fire control equipment.....	3.5	85.7	2.0	56.5	(Under .5)	(5-9.9)
1951	Small arms, 30 mm. and under.....	10.1	159.1	1.5	23.3	-	-
1961	Small arms ammunition.....	10.1	231.6	4.1	96.3	-	-
1999	Ordnance and accessories, n.e.c.....	25.8	461.8	7.1	131.8	(Under .5)	4.0
28	Chemicals and allied products.....	76.8	3,253.8	6.5	104.3	.2	13.1
2813	Industrial gases.....	3.0	145.0	-	(2-4.9)	(Under .5)	(5-9.9)
2819	Inorganic chemicals, n.e.c.....	60.8	2,847.1	(.5-.9)	(10-19.9)	(Under .5)	(5-9.9)
2892	Explosives.....	13.0	261.7	6.0	91.6	-	(Under .5)
2911	Petroleum refining.....	102.7	16,860.7	3.6	480.2	-	(Under .5)
3069	Rubber products, n.e.c.....	116.4	2,406.1	4.6	102.4	-	(5-9.9)
33	Primary metal industries.....	302.7	10,818.8	8.0	225.1	.5	16.1
3323	Steel foundries.....	62.3	1,051.3	.6	10.8	-	-
3339	Primary nonferrous metals, n.e.c.....	4.7	160.0	.3	7.7	(Under .5)	(2-4.9)
3351	Copper rolling and drawing.....	38.0	2,013.5	.5	19.8	-	.2
3352	Aluminum rolling and drawing.....	54.3	2,440.9	.9	29.6	-	.2
3356	Rolling and drawing, n.e.c.....	16.0	638.8	.3	15.7	-	(1-1.9)
3357	Nonferrous wiredrawing, etc.....	53.6	2,649.1	1.3	48.3	.3	9.2
3361	Aluminum castings.....	24.2	547.5	(Under .5)	(2-4.9)	-	(Under .5)
3369	Nonferrous castings, n.e.c.....	11.0	215.3	1.1	16.6	-	-
3391	Iron and steel forgings.....	31.9	908.0	1.4	34.0	-	-
3392	Nonferrous forgings.....	6.7	194.4	1.4	38.2	(Under .5)	(2-4.9)
34	Fabricated metal products.....	260.9	6,013.2	9.6	146.1	1.7	44.0
3441	Fabricated structural steel.....	57.9	1,408.2	1.0	23.9	.4	7.4
3443	Boiler shop products.....	54.2	1,261.0	4.1	31.0	.5	19.9
3451	Screw machine products.....	10.1	181.8	.7	9.4	-	.1
3452	Bolts, nuts, rivets, and washers.....	50.3	1,169.7	1.7	36.1	.3	6.9
3494	Valves and pipe fittings.....	76.0	1,669.3	1.4	28.9	.3	6.7
3499	Fabricated metal products, n.e.c.....	12.4	323.2	.7	16.8	.2	3.0
35	Machinery, except electrical.....	635.8	16,448.5	33.6	768.5	4.2	87.1
3511	Steam engines and turbines.....	34.4	788.8	4.5	108.5	.7	13.3
3519	Internal combustion engines.....	57.9	1,742.8	5.2	126.2	-	(Under .5)
3531	Construction machinery.....	111.2	3,332.1	3.9	98.7	(Under .5)	(2-4.9)
3537	Industrial trucks and tractors.....	16.5	511.0	1.5	43.3	-	-
3541	Metal-cutting machine tools.....	56.4	1,257.2	.6	(10-19.9)	(Under .5)	(1-1.9)
3542	Metal-forming machine tools.....	17.8	436.4	-	-	(Under .5)	(2-4.9)
3561	Pumps and compressors.....	64.8	1,636.2	3.0	63.4	-	.6
3562	Ball and roller bearings.....	55.2	1,229.8	.9	15.5	-	.4
3566	Power transmission equipment.....	42.4	931.1	1.1	19.9	-	2.2
3569	General industry machines, n.e.c.....	24.7	526.7	.8	19.8	.1	61.3
3571	Computing and related machines.....	111.1	3,174.6	10.5	226.0	2.9	1.3
3599	Miscellaneous machinery.....	43.4	881.8	1.5	25.6	.1	-
36	Electrical machinery.....	1,087.5	21,669.3	245.5	4,672.6	47.8	945.3
3611	Electric measuring instruments.....	38.7	719.7	6.2	115.9	1.5	32.9
3612	Transformers.....	34.5	850.8	.2	3.5	-	(Under .5)
3613	Switchgear and switchboards.....	50.7	1,133.1	.7	15.9	-	(5-9.9)
3521	Motors and generators.....	97.0	1,941.7	9.0	158.8	(Under .5)	(5-9.9)
3622	Industrial controls.....	33.4	739.0	.8	18.1	(Under .5)	(5-9.9)
3643	Current carrying devices.....	31.2	606.7	.4	7.1	-	(5-9.9)
3644	Noncurrent carrying devices.....	18.1	494.9	.7	14.5	(Under .5)	(2-4.9)
3661	Telephone; telegraph apparatus.....	100.8	2,238.9	4.4	78.7	(Under .5)	(2-4.9)
3662	Radio, TV communications equipment.....	327.5	6,438.5	198.6	3,850.5	42.2	833.8
3671	Electron tubes, receiving type.....	35.2	742.9	1.9	33.1	-	(1-1.9)
3672	Cathode ray picture tubes.....	16.4	286.7	5.6	95.0	.2	4.1
3673	Electron tubes, transmitting.....	65.7	879.2	3.3	54.6	(Under .5)	(2-4.9)
3674	Semiconductors.....	165.4	2,636.0	10.2	145.9	2.0	35.7
3679	Electronic components, n.e.c.....	13.8	447.3	1.2	31.4	(Under .5)	(5-9.9)
3691	Storage batteries.....	7.6	216.3	1.1	23.6	-	-
3692	Primary batteries, dry and wet.....	5.3	144.0	.3	7.0	-	(Under .5)
3693	X-ray apparatus and tubes.....	39.2	1,026.9	.9	19.0	(Under .5)	(2-4.9)
3694	Engine electrical equipment.....	7.0	126.9	-	-	-	-
3699	Electrical products, n.e.c.....	-	-	-	-	-	-

See footnotes at end of table.

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## SHIPMENTS, BY INDUSTRY AND AGENCY: 1965

Code	Industry	Government--Continued				Nongovernment	
		AEC		Other agencies			
		Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
7	All Industries, total.....	51.4	1,177.5	171.6	3,466.6	2,528.4	77,140.9
2	19 Ordnance, except complete guided missiles..	16.0	271.8	1.9	23.9	20.9	395.0
9)	1929 Ammunition, n.e.c.....	1.4	15.7	(Under .5)	(2-4.9)	2.3	36.4
-	1931 Tanks and tank components.....	-	-	(Under .5)	(Under .5)	(Under .5)	(10-19.9)
-	1941 Sighting and fire control equipment.....	-	-	(.5-.9)	(10-19.9)	(.5-.9)	(10-19.9)
-	1951 Small arms, 30 mm. and under.....	-	-	.1	1.3	8.5	134.5
-	1961 Small arms ammunition.....	-	-	.2	1.8	5.8	133.5
0	1999 Ordnance and accessories, n.e.c.....	14.6	256.1	.5	6.8	3.4	63.1
.1	28 Chemicals and allied products.....	19.3	607.6	1.3	37.3	49.5	2,491.5
.9)	2813 Industrial gases.....	-	(1-1.9)	(Under .5)	(2-4.9)	2.8	129.7
.9)	2819 Inorganic chemicals, n.e.c.....	19.3	606.5	.4	15.9	40.5	2,208.4
.5)	2892 Explosives.....	-	(Under .5)	(.5-.9)	(10-19.9)	6.2	153.4
.5)	2911 Petroleum refining.....	-	(.5-.9)	1.1	155.1	98.0	16,224.4
.9)	3069 Rubber products, n.e.c.....	-	(Under .5)	(2-4.9)	(50-99.9)	108.6	2,242.8
.1	33 Primary metal industries.....	.6	16.5	19.7	556.2	273.9	10,004.9
-	3323 Steel foundries.....	-	-	3.2	48.9	58.5	991.6
.9)	3339 Primary nonferrous metals, n.e.c.....	.5	12.0	(Under .5)	(5-9.9)	3.6	130.0
.2	3351 Copper rolling and drawing.....	-	-	.7	29.4	36.8	1,964.1
.2	3352 Aluminum rolling and drawing.....	-	-	4.0	146.1	49.4	2,265.0
.9)	3356 Rolling and drawing, n.e.c.....	-	-	(2-4.9)	(50-99.9)	13.3	531.5
9.2	3357 Nonferrous wiredrawing, etc.....	.1	3.0	2.0	69.5	49.9	2,519.1
.5)	3361 Aluminum castings.....	-	-	2.0	37.0	22.0	506.0
-	3369 Nonferrous castings, n.e.c.....	-	-	1.1	16.1	8.8	182.6
4.9)	3391 Iron and steel forgings.....	-	.2	2.5	60.5	28.0	813.3
4.9)	3392 Nonferrous forgings.....	-	(.5-.9)	(1-1.9)	50.3	3.6	101.7
4.0	34 Fabricated metal products.....	1.4	18.7	8.5	186.6	239.7	5,617.8
7.4	3441 Fabricated structural steel.....	-	-	1.6	40.3	54.9	1,336.6
9.9	3443 Boiler shop products.....	1.3	17.5	1.8	36.9	46.5	1,155.7
.1	3451 Screw machine products.....	-	-	.7	13.8	8.7	158.5
6.9	3452 Bolts, nuts, rivets, and washers.....	-	-	1.5	30.7	46.8	1,096.0
6.7	3494 Valves and pipe fittings.....	.1	1.2	2.7	57.4	71.5	1,575.1
3.0	3499 Fabricated metal products, n.e.c.....	-	-	.2	7.5	11.3	295.9
37.1	35 Machinery, except electrical.....	4.9	93.2	18.1	398.3	575.0	15,101.4
13.3	3511 Steam engines and turbines.....	.2	2.3	.6	13.2	28.4	651.3
.5)	3519 Internal combustion engines.....	-	(Under .5)	.5	16.4	52.2	1,599.8
.9)	3531 Construction machinery.....	(Under .5)	(5-9.9)	1.2	30.4	105.5	3,192.5
-	3537 Industrial trucks and tractors.....	-	-	.3	11.0	14.7	456.7
-1.9)	3541 Metal-cutting machine tools.....	(Under .5)	(1-1.9)	1.4	31.3	54.2	1,203.3
-4.9)	3542 Metal-forming machine tools.....	-	(Under .5)	.2	10.0	17.5	424.8
.6	3561 Pumps and compressors.....	-	(Under .5)	1.1	35.3	60.6	1,534.7
.4	3562 Ball and roller bearings.....	-	-	3.8	66.3	50.5	1,147.4
2.2	3566 Power transmission equipment.....	-	-	1.0	21.7	40.3	889.1
61.3	3569 General industry machines, n.e.c.....	4.0	77.7	.8	16.9	19.0	410.1
1.3	3571 Computing and related machines.....	.2	4.7	4.7	104.8	92.8	2,777.8
45.3	3599 Miscellaneous machinery.....	-	-	2.5	41.0	39.3	813.9
32.9	36 Electrical machinery.....	4.7	79.8	70.6	1,162.4	718.9	14,809.4
or .5)	3611 Electric measuring instruments.....	.2	4.4	4.0	77.0	26.8	489.5
5.9)	3612 Transformers.....	-	(Under .5)	2.5	45.0	31.8	801.9
5.9.9)	3613 Switchgear and switchboards.....	-	(Under .5)	1.9	31.2	48.1	1,085.0
5.9.9)	3621 Motors and generators.....	(Under .5)	(2-4.9)	3.4	59.5	84.2	1,714.7
5.9.9)	3622 Industrial controls.....	-	(.5-.9)	.9	20.1	31.4	692.7
5.9.9)	3643 Current carrying devices.....	(Under .5)	(.5-.9)	1.4	30.4	29.3	567.8
2.4.9)	3644 Noncurrent carrying devices.....	-	(Under .5)	.4	11.2	16.7	462.7
833.8	3661 Telephone; telegraph apparatus.....	-	(.5-.9)	1.7	32.0	94.5	2,122.7
1-1.9)	3662 Radio, TV communications equipment.....	.7	16.1	12.6	254.0	73.4	1,484.1
3671 Electron tubes, receiving type.....	{	(Under .5)	(5-9.9)	2.5	47.3	30.5	653.7
4.1	3672 Cathode ray picture tubes.....	-	-	2.7	44.6	7.3	131.4
2-4.9)	3673 Electron tubes, transmitting.....	.6	11.6	11.1	138.9	51.0	681.9
35.7	3674 Semiconductors.....	-	(Under .5)	1.4	314.3	128.9	2,124.9
5.9.9)	3679 Electronic components, n.e.c.....	1.4	15.2	22.9	-	11.9	401.1
er .5)	3691 Storage batteries.....	-	-	(Under .5)	(5-9.9)	6.3	186.6
2-4.9)	3692 Primary batteries, dry and wet.....	(Under .5)	(2-4.9)	.3	6.6	4.6	125.6
-	3693 X-ray apparatus and tubes.....	(Under .5)	(Under .5)	1.4	30.1	36.8	975.1
-	3694 Engine electrical equipment.....	-	(Under .5)	(10-19.9)	(Under .5)	5.4	108.0
-	3699 Electrical products, n.e.c.....	(1-1.9)	-	-	(2-4.9)	-	-

See footnotes at end of table.

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Table 4.--EMPLOYEES (ESTIMATED) AND VALUE OF

Code	Industry	Employees (1,000)	Total value of shipments (million dollars)	Government			
				DOD		NASA	
				Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars))
37	Transportation equipment.....	922.7	20,172.8	506.8	11,083.7	136.7	3,296.4
3713	Truck and bus bodies.....	16.4	337.4	2.1	45.0	-	(Under .5)
3715	Truck trailers.....	19.8	603.6	.6	14.2	-	(Under .5)
3721	Aircraft.....	291.4	7,092.1	180.8	4,466.2	24.7	712.8
1925	Complete guided missiles.....	139.4	3,127.9	68.1	1,518.1	63.4	1,502.6
3722	Aircraft engines and parts.....	176.8	4,075.6	94.4	2,248.1	32.8	785.0
3723	Aircraft propellers and parts.....	155.6	2,976.6	94.1	1,786.6	15.3	289.0
3729	Aircraft equipment, n.e.c.....	123.3	1,959.6	66.7	1,005.5	(Under .5)	(5-9.9)
3731	Ship building and repairing.....						
38	Instruments and related products.....	233.5	5,822.4	21.1	461.7	2.4	46.6
3811	Scientific instruments.....	21.7	421.2	6.3	124.8	(.5-.9)	(10-19.9)
3821	Mechanical measuring devices.....	58.4	1,273.3	2.4	45.4	.7	15.3
3831	Optical instruments and lenses.....	12.0	229.4	2.5	50.0	(.5-.9)	(10-19.9)
3842	Surgical appliances and supplies.....	23.7	552.8	1.4	23.0	(Under .5)	(2-4.9)
3843	Dental equipment and supplies.....	5.4	117.3	.3	7.0	-	(1-1.9)
3851	Ophthalmic goods.....	18.3	262.3	.5	7.1	-	(Under .5)
3861	Photographic equipment.....	64.9	2,374.9	6.6	186.8	.2	4.9
3871	Watches and clocks.....	26.7	564.0	.8	14.4	-	(Under .5)
3872	Watchases.....	2.4	27.2	-	-	-	-
	Miscellaneous industries.....	36.5	1,065.5	24.2	665.6	5.9	276.9

Note: Figures in parentheses represent a range in place of absolute employment and dollar-value figures where they would constitute a disclosure of company data.

## SHIPMENTS, BY INDUSTRY AND AGENCY: 1965--Continued

Code	Industry	Government--Continued				Nongovernment	
		AEC		Other agencies			
		Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)	Employees (1,000)	Value of shipments (million dollars)
37	Transportation equipment.....	2.5	46.2	36.2	646.2	240.5	5,100.3
3713	Truck and bus bodies.....	-	-	(1-1.9)	(20-49.9)	13.2	267.4
3715	Truck trailers.....	-	-	.3	7.5	18.9	581.5
3721	Aircraft.....	-	(Under .5)	(2-4.9)	(20-49.9)	82.9	1,863.0
1925	Complete guided missiles.....	(Under .5)	(5-9.9)	(.5-.9)	(10-19.9)	7.1	84.2
3722	Aircraft engines and parts.....	1.4	28.5	4.9	88.3	43.3	925.7
3723	Aircraft propellers and parts.....	.8	11.1	10.7	186.5	34.7	703.4
3729	Aircraft equipment, n.e.c.....	.8	(.5-.9)	15.7	272.0	40.4	675.1
3731	Ship building and repairing.....	-	-	-	-	-	-
38	Instruments and related products.....	2.0	42.8	10.6	233.3	197.4	5,038.0
3811	Scientific instruments.....	-	(.5-.9)	1.7	28.2	13.0	254.1
3821	Mechanical measuring devices.....	.5	11.0	2.7	51.7	52.1	1,149.9
3831	Optical instruments and lenses.....	-	(1-1.9)	.8	20.0	8.1	149.0
3842	Surgical appliances and supplies.....	-	(Under .5)	1.2	19.4	20.9	507.4
3843	Dental equipment and supplies.....	-	-	(Under .5)	(2-4.9)	4.9	105.3
3851	Ophthalmic goods.....	-	-	.2	4.0	17.6	251.1
3861	Photographic equipment.....	1.1	21.3	3.4	96.5	53.6	2,065.4
3871	Watches and clocks.....	.4	8.2	-	-	25.1	531.8
3872	Watchcases.....	-	-	-	-	-	-
	Miscellaneous industries.....	-	(Under .5)	(Under .5)	(5-9.9)	6.0	115.8

- Represents zero.

Table 8.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS BY INDUSTRY AND RANGES: 1965

(Ranges are based on total Government shipments)

Code	Industry	Total number of establish- ments	Establishments reporting--					
			Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
	All industries, total.....	6,274	50	67	87	525	1,020	4,525
19	Ordnance, except complete guided missiles.....	94	-	6	9	32	17	30
1929	Ammunition, n.e.c.....	27	-	2	3	10	8	4
1951	Tanks and tank components.....	11	-	1	2	5	1	2
1941	Sighting and fire control equipment.....	3	-	-	1	2	-	-
1951	Small arms, 30 mm. and under.....	14	-	-	-	2	1	11
1961	Small arms ammunition.....	10	-	1	-	3	3	3
1999	Ordnance and accessories, n.e.c.....	29	-	2	3	10	4	10
28	Chemicals and allied products.....	225	3	2	2	12	17	189
2813	Industrial gases.....	42	-	-	-	1	2	39
2819	Inorganic chemicals, n.e.c.....	151	3	2	1	6	7	132
2892	Explosives.....	32	-	-	1	5	8	18
2911	Petroleum refining.....	199	-	-	4	32	53	110
3069	Rubber products, n.e.c.....	267	-	-	-	8	16	243
33	Primary metal industries.....	736	-	-	2	41	94	599
3323	Steel foundries.....	145	-	-	-	1	14	130
3339	Primary nonferrous metals, n.e.c.....	17	-	-	-	4	1	12
3351	Copper rolling and drawing.....	71	-	-	-	2	10	59
3352	Aluminum rolling and drawing.....	91	-	-	-	14	10	67
3356	Rolling and drawing, n.e.c.....	36	-	-	-	3	5	28
3357	Nonferrous wiredrawing, etc.....	147	-	-	-	4	28	115
3361	Aluminum castings.....	87	-	-	-	2	9	76
3369	Nonferrous castings, n.e.c.....	45	-	-	-	2	6	37
3391	Iron and steel forgings.....	85	-	-	1	3	10	71
3392	Nonferrous forgings.....	12	-	-	1	6	1	4
34	Fabricated metal products.....	836	-	-	-	19	69	748
3441	Fabricated structural steel.....	213	-	-	-	3	13	197
3443	Boiler shop products.....	173	-	-	-	8	12	153
3451	Screw machine products.....	62	-	-	-	-	9	53
3452	Bolts, nuts, rivets, and washers.....	142	-	-	-	5	8	129
3494	Valves and pipe fittings.....	183	-	-	-	3	18	162
3499	Fabricated metal products, n.e.c.....	63	-	-	-	-	9	54
35	Machinery, except electrical.....	1,014	-	3	4	56	151	800
3511	Steam engines and turbines.....	18	-	1	-	7	2	8
3519	Internal combustion engines.....	50	-	-	-	8	10	32
3551	Construction machinery.....	157	-	-	-	8	21	128
3537	Industrial trucks and tractors.....	36	-	-	1	1	6	28
3541	Metal-cutting machine tools.....	106	-	-	-	3	7	96
3542	Metal-forming machine tools.....	44	-	-	-	-	2	42
3561	Pumps and compressors.....	141	-	-	-	5	17	119
3562	Ball and roller bearings.....	66	-	-	-	3	20	43
3566	Power transmission equipment.....	100	-	-	-	-	13	87
3569	General industry machines, n.e.c.....	77	-	1	-	3	10	63
3571	Computing and related machines.....	86	-	1	3	16	25	41
3599	Miscellaneous machinery.....	133	-	-	-	2	18	113
36	Electrical machinery.....	1,760	6	25	32	171	343	1,183
3611	Electric measuring instruments.....	95	-	-	1	14	23	57
3612	Transformers.....	49	-	-	1	-	7	41
3613	Switchgear and switchboards.....	103	-	-	-	2	12	89
3621	Motors and generators.....	170	-	1	-	10	35	124
3622	Industrial controls.....	49	-	-	-	3	6	40
3643	Current carrying devices.....	69	-	-	-	2	7	60
3644	Noncurrent carrying devices.....	51	-	-	-	1	2	48
3661	Telephone; telegraph apparatus.....	38	-	-	-	8	9	21
3662	Radio, TV communications equipment.....	331	6	23	28	82	68	124
3671	Electron tubes, receiving type.....	22	-	1	-	3	4	14
3672	Cathode ray picture tubes.....	31	-	-	-	12	12	7
3673	Electron tubes, transmitting.....	62	-	-	1	7	22	32
3674	Semiconductors.....	525	-	-	1	19	106	399
3679	Electronic components, n.e.c.....	54	-	-	-	2	8	44
3691	Storage batteries.....	20	-	-	-	1	7	12
3692	Primary batteries, dry and wet.....	13	-	-	-	1	4	8
3693	X-ray apparatus and tubes.....	49	-	-	-	3	10	36
3694	Engine electrical equipment.....	29	-	-	-	1	1	27
3699	Electrical products, n.e.c.....							

See footnotes at end of table.

Table 8.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS BY INDUSTRY AND RANGES: 1965--Continued

(Ranges are based on total Government shipments)

Code	Industry	Total number of establish- ments	Establishments reporting--					
			Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
37	Transportation equipment.....	665	38	28	27	116	174	282
3713	Truck and bus bodies.....	55	-	-	1	4	5	45
3715	Truck trailers.....	55	-	-	-	1	4	50
3721	Aircraft.....	48	14	2	6	6	8	12
1925	Complete guided missiles.....	26	8	6	5	6	1	-
3722	Aircraft engines and parts.....	111	10	6	8	28	24	35
3723	Aircraft propellers and parts.....	269	4	8	5	51	105	96
3729	Aircraft equipment, n.e.c.....	101	2	6	2	20	27	44
3731	Ship building and repairing.....							
38	Instruments and related products.....	445	1	2	2	27	81	332
3811	Scientific instruments.....	65	-	1	-	8	10	46
3821	Mechanical measuring devices.....	113	-	-	-	4	27	82
3831	Optical instruments and lenses.....	31	-	-	-	4	11	16
3842	Surgical appliances and supplies.....	61	-	-	-	2	12	47
3843	Dental equipment and supplies.....	22	-	-	-	1	1	20
3851	Ophthalmic goods.....	39	-	-	-	-	3	36
3861	Photographic equipment.....	70	1	1	2	5	12	49
3871	Watches and clocks.....	37	-	-	-	3	3	31
3872	Watchcases.....	7	-	-	-	-	2	5
	Miscellaneous industries.....	33	2	1	5	11	5	9

- Represents zero.

n.e.c. Not elsewhere classified.

Table 9.--NUMBER OF ESTABLISHMENTS REPORTING VALUE OF SHIPMENTS AND RECEIPTS FOR FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS AND SUPPLIERS BY GEOGRAPHIC AREAS AND RANGES: 1965

(Ranges are based on total Government shipments)

Division, State, and standard metropolitan statistical area	Total number of establish- ments	Establishments reporting--					
		Over \$100 million	\$50 to \$100 million	\$25 to \$50 million	\$5 to \$25 million	\$1 to \$5 million	Under \$1 million
United States, total.....	6,274	50	67	87	525	1,020	4,525
NEW ENGLAND							
Maine.....	13	-	-	1	2	2	8
Portland.....	4	-	-	-	1	1	2
New Hampshire.....	36	-	1	-	3	10	22
Vermont.....	18	-	-	1	2	3	12
Massachusetts.....	290	1	5	6	28	63	187
Boston.....	164	1	3	4	16	45	95
Lawrence-Haverhill, Mass.-N.H.....	7	-	1	-	-	2	4
Lowell.....	5	-	-	1	-	1	3
New Bedford.....	7	-	-	-	-	2	5
Pittsfield.....	4	-	1	-	-	1	2
Providence-Pawtucket-Warwick, R.I.-Mass. (See Rhode Island)	29	-	-	-	-	-	20
Springfield-Chicopee-Holyoke, Mass.-Conn.....	61	-	-	-	4	5	48
Rhode Island.....	68	-	-	-	4	9	54
Connecticut.....	260	5	1	3	20	54	177
Bridgeport.....	40	2	-	-	3	5	30
Hartford.....	46	2	-	1	3	7	33
Meriden.....	4	-	-	-	-	2	2
New Britain.....	16	-	-	1	-	2	12
New Haven.....	29	-	1	-	1	2	22
New London-Groton-Norwich.....	5	-	-	-	3	3	8
Norwalk.....	18	1	-	-	-	1	3
Stamford.....	12	-	-	-	2	7	8
Waterbury.....	28	-	-	-	4	12	12

See footnotes at end of table.

APPENDIX A.

INDUSTRY GROUP DESCRIPTIONS

Turbines, construction machinery, machine tools, and computers and related products (SIC 3511, 3531, 3541, 3542, 3571).

Communication equipment (SIC 3661, 3662).

Electronic components and accessories (SIC 3671, 3672, 3673, 3674, 3679).

Aerospace industries (SIC 3721, 3722, 3723, 3729, 1925).

Shipbuilding and repairing and ordnance (SIC 3731 and 19, except 1925).

Scientific instruments, mechanical measuring devices, optical instruments, and photographic equipment (SIC 3811, 3821, 3831, 3861).

Surgical and dental equipment, ophthalmic goods and watches and watchcases (SIC 3842, 3843, 3851, 3871 and 3872).

Other Machinery - (SIC 3519, 3537, 3561, 3562, 3566, 3569, 3599).

Electric transmission and industrial apparatus; wiring devices; and miscellaneous electrical equipment (SIC 3611, 3612, 3613, 3621, 3622, 3643, 3644, 3691, 3692, 3693, 3694, 3699).

Selected fabricated metal products (SIC 3441, 3443, 3451, 3452, 3494, 3499).

Truck bodies and truck trailers (SIC 3713, 3715).

Selected chemicals and allied products (SIC 2813, 2819, 2892).

Petroleum refineries (SIC 2911).

Fabricated rubber products n.e.c. (SIC 3069).

Selected primary metal industries (SIC 3323, 3339, 3351, 3352, 3356, 3357, 3361, 3369, 3391, 3392).

## APPENDIX B. DEPARTMENT OF DEFENSE

Item	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (\$1,000)	Wages (\$1,000)	Materials, supplies, and parts used (\$1,000)	Contractual services and other costs (\$1,000)
<b>GEOGRAPHIC AREA</b>							
United States, total.....	288,458	2,369,650	194,843	357,614	1,482,415	1,079,796	646,058
New England division.....	22,877	181,806	15,694	29,304	118,406	70,971	21,731
New Hampshire.....	7,466	56,814	5,356	9,715	39,465	19,132	3,205
Massachusetts.....	9,986	81,156	7,064	12,971	54,679	26,912	13,946
Boston.....	8,014	64,272	5,896	10,644	45,308	22,910	6,942
Rhode Island.....	4,409	34,226	3,062	6,201	22,704	16,053	4,580
Connecticut.....	1,016	9,610	212	417	1,558	8,874	-
Middle Atlantic division.....	45,220	379,884	25,265	45,632	186,926	157,007	217,458
New York.....	4,872	42,980	2,637	5,072	19,831	30,737	5,820
Albany-Schenectady-Troy, N.Y.....	3,824	31,098	2,433	4,718	18,055	19,432	5,820
New York.....	1,048	11,882	204	354	1,776	11,255	-
New Jersey.....	11,140	98,581	3,577	6,327	24,268	19,169	76,310
Pennsylvania.....	29,208	238,323	19,051	34,233	142,827	107,101	135,328
Philadelphia.....	28,426	187,703	12,810	22,877	104,011	76,627	124,991
East North Central division.....	15,689	126,219	10,415	19,806	81,071	80,662	25,131
Chicago.....	1,917	13,691	1,388	2,482	9,966	3,174	1,341
Indiana.....	6,912	54,327	4,574	8,841	33,862	42,102	15,096
Illinois.....	6,860	58,201	4,453	8,483	37,243	35,386	8,694
West North Central division.....	72	738	21	39	176	157	43
Iowa.....	30	219	17	32	127	5	13
Missouri.....	42	519	4	7	49	152	30
South Atlantic division.....	68,614	573,843	44,406	81,180	329,608	214,185	153,677
Maryland.....	19,725	187,362	7,500	13,528	55,758	84,069	69,813
District of Columbia.....	4,701	49,087	1,083	1,920	7,776	12,314	40,818
Virginia.....	19,685	151,642	15,475	28,851	116,255	45,993	20,250
Norfolk-Portsmouth.....	15,594	120,891	13,207	24,682	101,418	34,793	12,626
North Carolina.....	2,105	18,594	1,880	3,819	16,304	2,192	1,180
South Carolina.....	7,534	60,634	5,942	10,716	47,534	16,532	6,706
Georgia.....	6,852	44,569	5,809	9,392	35,735	38,309	6,057
Macon.....	6,852	44,569	5,809	9,392	35,735	38,309	6,057
Florida.....	8,012	61,955	6,717	12,954	50,246	14,776	8,853
East South Central division.....	17,483	161,696	6,751	12,565	53,680	54,355	26,994
Kentucky.....	3,647	28,285	2,345	4,617	18,847	21,602	5,314
Alabama.....	13,836	133,411	4,406	7,948	34,833	32,753	21,680
West South Central division.....	30,630	203,126	24,953	43,976	161,463	153,493	13,200
Arkansas.....	1,631	11,754	1,053	1,792	6,888	7,056	2,141
Oklahoma.....	13,172	83,568	11,324	20,364	71,508	111,143	269
Texas.....	15,827	107,804	12,576	21,820	83,067	35,294	10,790
Mountain division.....	10,398	78,896	8,208	14,730	60,154	55,279	8,529
Colorado.....	755	6,234	477	944	3,762	9,488	1,346
Utah.....	9,643	72,662	7,731	13,786	56,392	45,791	7,183
Pacific division.....	77,475	663,442	59,130	110,382	490,931	293,687	179,295
Washington.....	11,303	90,327	8,644	15,568	68,140	48,111	7,620
California.....	60,333	521,965	45,738	86,316	382,469	226,992	168,883
San Bernardino-Riverside-Ontario.....	10,632	83,534	8,300	16,373	60,897	46,759	78,495
San Diego.....	8,355	78,856	6,319	12,663	54,262	29,385	2,108
San Francisco-Oakland.....	28,346	246,229	22,390	42,445	199,734	78,789	21,536
Hawaii.....	5,839	51,150	4,748	8,498	40,322	18,584	2,792
<b>SIC CODES AND MAJOR ACTIVITY</b>							
All manufacturing facilities, total.....	288,458	2,369,650	194,843	357,614	1,482,415	1,079,796	646,058
23 Apparel and related products.....	2,384	11,934	2,269	3,995	11,059	2,244	592
281 Basic chemicals.....	5,964	51,827	2,397	4,253	17,076	16,434	13,008
289 Miscellaneous chemical products.....	2,996	22,848	2,032	3,727	14,127	38,828	1,831
353 Construction and like equipment.....	241	2,006	208	363	1,702	561	3,339
366 Communication equipment.....	16,766	137,355	7,337	13,430	52,766	77,917	31,760
372 Aircraft and parts.....	40,045	335,442	32,936	65,471	266,479	103,583	152,627
373 Ship and boat building.....	83,223	679,824	65,989	117,668	534,759	243,831	59,007
382 Mechanical measuring devices.....	30	219	17	32	127	5	13
19 Ordnance and accessories.....	70,450	620,371	36,525	67,111	280,675	272,057	185,786
192 Missiles and ammunition, n.e.c.....	44,430	387,167	21,813	39,831	160,867	190,672	142,686
-- Research and development.....	66,359	507,824	45,133	81,564	303,645	324,336	198,095

Note: Includes manufacturing facilities, research and development activities and manufacturing performed in supply depots.

FACILITIES: 1966

Item	Value of shipments or receipts for service by typed activity						Value added by manufacture (\$1,000)
	Manufacture and assembly (\$1,000)	Construction and conversion (\$1,000)	Research and development (\$1,000)	Other receipts (\$1,000)	Total billings (\$1,000)	Total revenue (\$1,000)	
<b>GEOGRAPHIC AREA</b>							
United States, total.....	424,585	293,818	1,019,546	2,326,529	4,064,498	4,075,752	2,997,426
New England division.....	21,289	61,661	56,998	127,013	266,961	270,557	199,586
New Hampshire.....	810	33,752	1,590	39,990	76,142	78,977	59,845
Massachusetts.....	19,407	27,909	15,628	54,260	117,204	118,343	91,431
Boston.....	6,505	27,909	7,648	47,002	89,064	90,203	67,293
Rhode Island.....	1,072	-	21,296	32,763	55,131	54,753	38,700
Connecticut.....	-	-	18,484	-	18,484	18,484	9,610
Middle Atlantic division.....	119,010	42,303	308,079	264,803	734,195	743,743	586,736
New York.....	38,429	873	26,760	8,197	74,259	74,248	43,511
Albany-Schenectady-Troy, N.Y.....	38,429	873	8,623	8,197	51,122	51,111	31,629
New York.....	-	-	23,137	-	23,137	23,137	11,882
New Jersey.....	28,922	890	130,719	38,954	199,485	199,956	180,787
Pennsylvania.....	51,659	40,540	150,600	217,652	460,451	469,539	362,438
Philadelphia.....	26,208	39,191	150,023	168,105	383,527	392,579	315,952
East North Central division.....	110,441	559	22,939	101,289	235,228	232,800	152,138
Ohio.....	-	-	-	18,206	18,206	18,206	15,032
Indiana.....	50,101	-	18,712	43,151	111,964	111,597	69,495
Illinois.....	60,340	559	4,227	39,932	105,058	102,997	67,611
West North Central division.....	-	-	82	858	940	940	783
Iowa.....	-	-	-	239	239	239	234
Missouri.....	-	-	82	619	701	701	549
South Atlantic division.....	82,747	24,260	361,397	470,565	938,969	944,978	730,803
Maryland.....	65,379	-	221,009	56,049	342,437	340,802	256,743
District of Columbia.....	-	-	95,407	6,119	101,526	101,929	89,615
Virginia.....	11,718	9,525	33,459	163,853	218,555	218,604	172,611
Norfolk-Portsmouth.....	4,943	9,525	3,652	147,790	165,909	168,618	133,825
North Carolina.....	581	-	71	19,023	19,675	21,858	19,666
South Carolina.....	297	14,735	678	65,842	81,552	86,122	69,590
Georgia.....	-	-	-	88,936	88,936	88,936	50,627
Macon.....	-	-	-	88,936	88,936	88,936	50,627
Florida.....	4,772	-	10,773	70,743	86,288	86,727	71,951
East South Central division.....	29,097	-	46,133	185,240	260,470	248,406	194,411
Kentucky.....	29,097	-	1,833	40,932	71,862	59,798	38,556
Alabama.....	-	-	44,300	144,308	188,608	188,608	155,855
West South Central division.....	27,932	1,504	273	340,452	370,161	370,789	217,396
Arkansas.....	18,692	-	59	2,489	21,240	21,868	14,812
Oklahoma.....	8,603	-	214	186,163	194,980	194,980	83,937
Texas.....	637	1,504	-	151,800	153,941	153,941	118,647
Mountain division.....	4,832	-	11,839	118,107	134,778	134,793	79,514
Colorado.....	2,114	-	-	6,947	9,061	9,061	-427
Utah.....	2,718	-	11,839	111,160	125,717	125,732	79,941
Pacific division.....	29,237	163,531	211,806	718,202	1,122,796	1,128,746	836,059
Washington.....	11,384	72,310	6,987	63,797	154,478	151,526	103,415
California.....	17,853	89,752	204,715	583,274	895,614	903,779	677,787
San Bernardino-Riverside-Ontario.....	5,388	738	23,761	182,165	212,052	212,033	165,274
San Diego.....	5,760	-	34,356	68,223	108,339	109,071	79,686
San Francisco-Oakland.....	5,696	77,911	16,422	240,907	340,956	347,668	269,879
Hawaii.....	-	-	1,469	104	71,131	72,704	54,857
<b>SIC CODES AND MAJOR ACTIVITY</b>							
All manufacturing facilities, total.....	424,585	293,818	1,019,546	2,326,529	4,064,498	4,075,752	2,997,426
23 Apparel and related products.....	14,371	-	341	26	14,738	14,774	12,530
281 Basic chemicals.....	23,301	-	33,034	24,904	81,239	81,867	65,433
289 Miscellaneous chemical products.....	52,448	-	6,864	5,042	64,354	63,078	24,250
353 Construction and like equipment.....	-	-	-	6,600	6,600	6,600	6,039
366 Communication equipment.....	78,429	2,374	89,689	72,265	243,257	242,972	165,415
372 Aircraft and parts.....	22,951	-	129,062	405,920	557,959	564,596	461,013
373 Ship and boat building.....	6,740	287,905	19,657	658,765	973,067	995,786	752,955
382 Mechanical measuring devices.....	-	6	-	239	239	239	234
19 Ordnance and accessories.....	221,684	3,033	376,670	492,093	1,093,480	1,076,227	804,180
192 Missiles and ammunition, n.e.c.....	87,812	1,610	304,399	329,146	722,958	717,482	526,820
-- Research and development.....	4,661	-	364,229	660,675	1,029,565	1,029,613	705,377

- Represents zero.

Source: Form MA-171 "Department of Defense Establishments Primarily Engaged in Manufacturing and Assembly and/or Research and Development Owned and Operated by the Department of Defense."

## APPENDIX C. DEPARTMENT OF DEFENSE

Item	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Total (number)	Payroll ( 1,000)	Total (number)	Man-hours (1,000)	Wages ( 1,000)	Materials, supplies, and parts used ( 1,000)	Contractual services and other costs ( 1,000)
<b>GEOGRAPHIC AREA</b>							
United States, total.....	265,084	2,090,319	176,622	325,433	1,300,318	795,640	443,018
New England division.....	21,964	166,661	15,674	29,242	114,517	47,207	24,105
New Hampshire.....	7,083	50,886	5,211	9,475	36,348	15,942	2,711
Massachusetts.....	10,317	78,748	7,487	13,844	55,580	25,480	16,116
Boston.....	8,019	60,413	6,141	11,369	45,752	20,360	11,180
Rhode Island.....	3,577	28,311	2,755	5,518	21,032	5,149	5,278
Connecticut.....	987	8,716	221	405	1,557	636	-
Middle Atlantic division.....	45,166	358,881	27,599	50,376	202,484	123,605	51,686
New York.....	11,017	90,733	7,880	15,124	62,212	30,697	6,420
Albany-Schneectady-Troy, N.Y.....	3,287	26,733	2,107	3,864	16,020	11,472	4,091
New York.....	7,730	64,000	3,773	11,260	46,192	19,225	2,329
New Jersey.....	7,542	60,137	2,663	4,344	15,700	14,397	7,899
Pennsylvania.....	26,607	208,011	17,056	30,908	124,572	78,511	37,367
Philadelphia.....	19,017	158,143	10,904	19,983	86,012	42,234	29,419
East North Central division.....	14,479	112,966	9,519	17,718	72,314	41,829	28,503
Ohio.....	1,909	13,286	1,420	2,521	19,976	11,801	1,341
Indiana.....	5,948	45,608	3,756	7,140	27,319	21,822	17,295
Illinois.....	6,622	54,072	4,353	8,057	35,019	21,808	9,867
West North Central division.....	29	193	16	28	108	7	32
Iowa.....	29	193	16	28	108	7	32
South Atlantic division.....	64,020	519,501	40,934	74,964	301,784	168,965	136,218
Maryland.....	18,864	168,296	7,025	12,584	51,765	55,272	56,763
District of Columbia.....	4,776	46,023	1,116	1,972	7,813	11,351	40,754
Virginia.....	17,971	138,726	14,135	26,131	107,331	37,212	19,315
Norfolk-Portsmouth.....	14,349	111,941	12,176	22,548	94,854	30,369	9,382
North Carolina.....	1,861	14,678	1,655	3,191	12,770	2,531	2,067
South Carolina.....	6,675	50,766	5,403	9,558	40,397	15,981	6,118
Georgia.....	6,437	41,731	5,394	9,752	33,000	36,583	3,877
Macon.....	6,437	41,731	5,394	9,752	33,000	36,583	3,877
Florida.....	7,436	59,281	6,206	11,776	48,708	10,035	7,324
East South Central division.....	16,922	154,415	4,724	9,281	35,444	56,495	21,933
Kentucky.....	3,050	22,882	2,008	3,862	15,441	17,363	4,256
Alabama.....	13,872	131,533	2,716	5,419	20,003	39,132	17,677
West South Central division.....	25,226	161,415	20,026	35,556	123,801	102,315	10,168
Arkansas.....	1,439	10,325	879	1,748	5,833	5,582	1,519
Oklahoma.....	9,962	63,617	8,331	14,952	52,774	73,140	461
Texas.....	13,825	87,473	10,816	18,856	65,194	23,593	8,188
Mountain division.....	8,660	63,082	6,287	11,374	44,885	48,995	18,892
Colorado.....	878	6,338	594	1,124	4,112	10,741	3,687
New Mexico.....	303	2,996	17	32	134	4,172	9,346
Utah.....	7,479	53,748	5,676	10,218	40,639	34,082	5,859
Pacific division.....	68,618	553,205	51,843	96,894	404,981	206,222	151,481
Washington.....	10,679	81,984	8,113	14,935	61,931	34,602	7,396
California.....	52,774	428,510	39,528	74,370	309,223	155,349	141,306
San Bernardino-Riverside-Ontario.....	7,820	65,240	5,892	12,037	45,594	35,372	71,486
San Diego.....	7,588	65,382	5,661	10,886	47,870	15,328	7,427
San Francisco-Oakland.....	25,626	198,069	20,827	38,450	158,112	63,691	18,259
Hawaii.....	5,165	42,711	4,202	7,589	33,827	16,271	2,779
<b>SIC CODES AND MAJOR ACTIVITY</b>							
All manufacturing facilities, total.....	265,084	2,090,319	176,622	325,433	1,300,318	795,640	443,018
23 Apparel and related products.....	1,567	7,933	1,466	2,518	7,185	1,112	495
281 Basic chemicals.....	5,862	47,883	2,321	4,250	16,031	22,891	13,386
289 Miscellaneous chemical products.....	2,565	19,289	1,652	3,020	11,323	20,054	10,622
353 Construction and like equipment.....	313	2,601	270	471	2,207	1,251	4,708
366 Communication equipment.....	14,125	112,765	5,796	10,290	38,904	53,650	20,904
372 Aircraft and parts.....	31,574	307,058	30,648	58,970	247,168	57,768	67,515
373 Ship and boat building.....	81,130	619,898	64,537	117,240	487,191	222,029	44,198
382 Mechanical measuring devices.....	29	193	16	28	108	7	32
19 Ordnance and accessories.....	64,011	539,288	32,111	59,162	237,548	168,103	142,214
192 Missiles and ammunition, n.e.c.....	39,324	33,470	18,223	33,671	128,989	106,037	106,630
-- Research and development.....	63,908	433,411	37,805	69,484	252,713	248,774	143,884

Note: Includes manufacturing facilities, research and development activities and manufacturing performed in supply depots.

FACILITIES: 1965

Item	Value of shipments or receipts for service by type of activity						Value added by manufacture (\$1,000)
	Manufacture and assembly (\$1,000)	Construction and conversion (\$1,000)	Research and development (\$1,000)	Other receipts (\$1,000)	Total billings (\$1,000)	Total revenue (\$1,000)	
<b>GEOGRAPHIC AREA</b>							
United States, total.....	414,880	307,522	729,111	1,881,434	3,332,947	3,363,251	2,555,837
New England division.....	33,510	56,082	36,725	111,921	238,238	242,898	195,691
New Hampshire.....	495	40,190	1,368	27,375	69,428	70,791	54,849
Massachusetts.....	31,983	15,892	16,243	55,428	119,546	122,246	96,766
Boston.....	17,286	15,762	9,346	48,198	90,592	93,292	72,932
Rhode Island.....	1,032	-	8,739	29,118	38,889	39,486	34,337
Connecticut.....	-	-	10,375	-	10,375	10,375	9,739
Middle Atlantic division.....	90,944	71,371	133,736	229,323	525,374	529,285	409,394
New York.....	25,203	49,180	3,765	46,853	125,001	125,452	94,755
Albany-Schenectady-Troy, N.Y.....	24,799	182	3,246	9,513	38,040	38,028	26,556
New York.....	404	48,998	219	37,340	86,961	87,424	68,199
New Jersey.....	20,526	867	39,215	26,279	86,887	86,674	72,277
Pennsylvania.....	45,215	21,324	90,756	156,191	313,486	317,159	242,362
Philadelphia.....	25,038	20,936	90,571	93,403	229,948	233,588	191,354
East North Central division.....	90,596	357	21,225	80,399	192,577	193,156	142,685
Ohio.....	-	-	-	18,458	18,458	18,458	14,627
Indiana.....	39,507	-	16,706	28,110	84,323	85,073	63,251
Illinois.....	51,089	357	4,519	33,831	89,796	89,615	64,807
West North Central division.....	-	-	-	232	232	232	225
Iowa.....	-	-	-	232	232	232	225
South Atlantic division.....	71,420	32,378	315,054	406,173	825,025	827,170	646,205
Maryland.....	46,708	-	182,056	46,908	275,672	275,048	219,776
District of Columbia.....	-	-	93,052	5,572	98,624	98,262	86,911
Virginia.....	8,987	16,122	32,380	143,301	200,790	198,144	160,932
Norfolk-Portsmouth.....	5,445	16,122	4,356	131,683	157,606	154,597	124,228
North Carolina.....	365	-	131	18,501	18,997	19,399	16,868
South Carolina.....	77	16,256	201	53,215	69,749	75,547	59,566
Georgia.....	8,858	-	327	73,646	82,831	82,654	84,071
Macon.....	8,858	-	327	73,646	82,831	82,654	84,071
Florida.....	6,425	-	6,907	65,030	78,362	78,116	68,081
East South Central division.....	79,841	1,494	42,140	113,582	237,057	237,052	180,557
Kentucky.....	27,256	-	2,331	18,674	48,261	48,256	30,893
Alabama.....	52,585	1,494	39,809	94,908	188,796	188,796	149,664
West South Central division.....	17,564	868	276	254,393	273,101	273,828	171,513
Arkansas.....	13,577	-	266	2,786	16,629	17,356	11,774
Oklahoma.....	3,538	-	10	133,670	137,218	137,218	64,078
Texas.....	449	868	-	117,937	119,254	119,254	95,661
Mountain division.....	9,833	-	27,833	86,785	124,451	124,168	78,825
Colorado.....	8,036	-	5	6,615	14,656	14,373	7,384
New Mexico.....	-	-	16,514	-	16,514	16,514	12,342
Utah.....	1,797	-	11,314	80,170	93,281	93,281	59,099
Pacific division.....	21,172	144,972	152,122	598,626	916,892	935,462	730,742
Washington.....	8,777	50,609	3,747	60,917	124,050	127,371	92,769
California.....	12,395	88,948	147,124	480,612	729,079	744,021	590,174
San Bernardino-Riverside-Ontario.....	1,866	484	1,389	149,633	169,372	169,372	135,502
San Diego.....	3,663	-	23,364	62,341	89,368	90,363	73,035
San Francisco-Oakland.....	5,977	83,265	12,526	194,615	296,383	307,706	244,015
Hawaii.....	-	5,415	1,251	57,097	63,763	64,070	47,799
<b>SIC CODES AND MAJOR ACTIVITY</b>							
All manufacturing facilities, total.....	414,880	307,522	729,111	1,881,434	3,332,747	3,363,251	2,555,837
23 Apparel and related products.....	9,428	-	50	40	9,518	9,551	8,439
281 Basic chemicals.....	27,131	-	34,939	21,893	83,963	84,407	61,516
289 Miscellaneous chemical products.....	33,339	-	4,306	4,624	42,269	41,755	21,701
353 Construction and like equipment.....	-	-	-	8,560	8,560	8,560	7,309
366 Communication equipment.....	57,139	1,739	78,233	46,610	183,721	184,819	136,385
372 Aircraft and parts.....	24,354	271	68,616	326,809	420,050	421,265	357,864
373 Ship and boat building.....	8,583	302,481	22,450	568,557	902,071	920,743	708,714
382 Mechanical measuring devices.....	-	-	-	232	232	232	225
19 Ordnance and accessories.....	186,825	1,537	301,404	358,024	847,790	847,808	680,457
192 Missiles and ammunition, n.e.c.....	65,504	868	228,923	243,107	538,402	539,837	437,552
-- Research and development.....	68,081	1,494	219,113	546,085	834,773	834,101	573,227

- Represents zero.

Source: Form MA-171 "Department of Defense Establishments Primarily Engaged in Manufacturing and Assembly and/or Research and Development Owned and Operated by the Department of Defense."

## APPENDIX D. COSTS INCURRED BY U.S. ATOMIC ENERGY COMMISSION, BY LOCATION: 1966 AND 1965

(thousands of dollars. The following table shows the costs incurred by the AEC in fiscal year 1966 and 1965. Allocations of costs are made in accordance with the physical location of contractors and AEC offices but do not necessarily represent funds spent in those locations)

Location	1966			1965		
	Total	Operations <sup>1</sup>	Construction	Total	Operations	Construction
Alabama.....	97	97	-	129	128	1
Alaska.....	55	55	-	45	45	-
Arizona.....	7,931	7,930	1	8,666	8,666	-
Arkansas.....	263	263	-	1,290	1,290	-
California.....	338,539	262,363	76,176	350,274	275,551	74,723
Colorado.....	62,344	55,649	6,695	71,528	62,836	8,692
Connecticut.....	16,681	15,665	1,016	30,263	26,520	3,743
Delaware.....	45	45	-	66	63	3
District of Columbia.....	15,447	15,327	120	12,437	11,263	1,174
Florida.....	16,092	14,451	1,641	18,690	16,903	1,787
Georgia.....	995	960	35	962	962	-
Hawaii (including Pacific test area).....	4,146	4,113	33	21,679	21,679	-
Idaho.....	68,214	50,670	17,544	89,442	61,821	27,621
Illinois.....	97,024	81,339	15,685	94,602	75,096	19,506
Indiana.....	3,043	2,970	73	6,860	6,785	75
Iowa.....	19,008	16,008	3,000	19,593	15,819	3,774
Kansas.....	594	581	13	468	468	-
Kentucky.....	62,538	61,951	587	67,328	66,069	1,259
Louisiana.....	333	333	-	360	360	-
Maine.....	349	349	-	271	271	-
Maryland.....	40,324	40,003	321	39,459	39,243	216
Massachusetts.....	28,135	23,908	4,227	31,121	25,108	6,013
Michigan.....	5,745	5,368	377	4,800	3,993	807
Minnesota.....	3,990	3,477	513	3,802	3,772	30
Mississippi.....	75	75	-	149	149	-
Missouri.....	87,731	82,793	4,938	110,114	103,137	6,977
Montana.....	91	91	-	28	28	-
Nebraska.....	6,048	799	5,249	1,867	1,456	411
Nevada.....	187,401	165,269	22,132	174,551	146,096	28,455
New Hampshire.....	86	86	-	108	108	-
New Jersey.....	19,695	16,152	3,543	18,947	15,351	3,596
New Mexico.....	407,599	360,952	46,647	430,022	379,043	50,979
New York.....	127,901	104,768	23,133	125,385	102,492	22,993
North Carolina.....	1,987	1,498	489	1,457	1,302	155
North Dakota.....	24	24	-	19	19	-
Ohio.....	118,991	111,025	7,966	130,724	121,890	8,834
Oklahoma.....	339	339	-	185	185	-
Oregon.....	1,300	1,278	22	681	681	-
Pennsylvania.....	93,570	89,237	4,333	97,941	89,227	8,714
Rhode Island.....	676	676	-	670	670	-
South Carolina.....	96,586	81,564	15,022	92,294	81,448	10,846
South Dakota.....	3,991	3,991	-	4,817	4,817	-
Tennessee.....	219,015	185,797	33,218	255,212	214,715	40,497
Texas.....	23,177	19,893	3,284	17,242	12,921	4,321
Utah.....	17,089	16,780	309	26,607	26,537	70
Vermont.....	30	30	-	45	27	18
Virginia.....	2,653	2,592	61	2,639	2,639	-
Washington.....	153,948	133,494	20,454	156,298	135,278	21,020
West Virginia.....	314	314	-	175	175	-
Wisconsin.....	6,820	3,715	3,105	8,415	3,809	4,606
Wyoming.....	34,748	34,734	14	34,957	34,957	-
TOTALS.....	2,403,817	2,081,841	321,976	2,565,684	2,203,868	361,816

Note: Allocations of costs are made in accordance with the physical location of contractors and AEC offices but do not necessarily represent funds spent in these locations. Not included in the totals are the following:

Location	1966			1965		
	Total	Operations	Construction	Total	Operations	Construction
Puerto Rico.....	3,850	2,831	1,019	4,433	2,673	1,760
Foreign countries.....	55,947	55,747	200	88,735	88,396	339

<sup>a</sup> Represents zero.

<sup>b</sup> Excludes depreciation.

## APPENDIX E. U.S. ATOMIC ENERGY COMMISSION FINANCIAL DATA AND OPERATING EMPLOYMENT BY GEOGRAPHIC AREAS: FISCAL YEARS 1966 AND 1967

State and standard metropolitan statistical area	Plant and equipment investment June 30, 1967 (million dollars)	Fiscal year 1967 operating cost (million dollars)	Operating employment June 1967	State and standard metropolitan statistical area	Plant and equipment investment June 30, 1966 (million dollars)	Fiscal year 1966 operating cost (million dollars)	Operating employment June 1966
1967							
California.....	502.4	220.6	14,448	California.....	468.7	215.8	14,054
Los Angeles-Long Beach.....	57.0	29.5	2,241	Los Angeles-Long Beach.....	60.0	39.4	2,198
Sacramento.....	5.6	4.4	879	Sacramento.....	5.1	6.1	611
San Francisco-Oakland.....	325.2	169.2	10,031	San Francisco-Oakland.....	299.7	161.2	9,979
San Jose.....	112.1	15.3	1,109	San Jose.....	103.9	9.1	1,266
Santa Barbara.....	2.5	2.2	188	Colorado.....	123.8	32.4	3,020
Colorado.....	130.4	31.3	3,070	Denver.....	119.6	31.6	2,932
Denver.....	126.2	30.2	2,944	Other.....	4.2	0.8	88
Other.....	4.2	1.1	126	Connecticut.....	80.7	13.7	200
Connecticut (Hartford).....	16.3	3.7	184	New Haven.....	8.3	3.1	7
Florida (Tampa-St. Petersburg).....	21.4	12.7	1,372	Other.....	72.4	10.6	193
Idaho.....	420.0	54.9	4,029	Florida (Tampa-St. Petersburg).....	18.1	12.4	1,159
Illinois (Chicago).....	311.0	69.7	5,213	Idaho.....	396.6	50.0	3,556
Indiana (South Bend).....	2.7	1.3	130	Illinois.....	293.8	72.9	5,103
Iowa.....	62.3	12.9	2,065	Champaign-Urbana.....	2.9	4.3	17
Kentucky.....	786.9	52.7	1,092	Chicago.....	290.9	68.6	5,086
Massachusetts (Boston).....	27.5	13.0	1,540	Iowa.....	59.5	15.1	2,042
Missouri (Kansas City).....	75.1	73.6	6,341	Kentucky.....	787.0	61.7	1,091
Nevada.....	248.5	126.2	5,896	Massachusetts (Boston).....	40.7	12.5	1,705
New Jersey (Trenton).....	60.1	13.6	845	Michigan (Ann Arbor).....	1.9	2.3	250
New Mexico.....	566.7	108.2	14,712	Minnesota (Minneapolis-St. Paul).....	4.8	1.7	91
Albuquerque.....	219.7	20.6	9,314	Missouri.....	133.0	80.6	6,760
Other.....	347.0	87.6	5,398	Kansas City, Mo.-Kans.....	70.3	72.4	6,316
New York.....	382.5	96.2	6,366	St. Louis, Mo.-Ill.....	62.7	8.2	444
Albany-Schenectady-Troy.....	123.0	42.6	2,233	Nevada.....	220.4	142.2	7,213
Buffalo.....	7.7	0.4	117	Las Vegas.....	-	12.0	1,351
New York.....	245.2	48.4	3,671	Other.....	220.4	130.2	5,862
Rochester.....	6.6	4.8	345	New Jersey (Trenton).....	57.7	12.9	866
Ohio.....	959.8	100.4	5,323	New Mexico.....	566.9	270.6	15,031
Cincinnati, Ohio-Ky.-Ind.....	127.2	28.7	1,992	Albuquerque.....	205.4	184.6	9,407
Columbus.....	1.0	3.5	21	Other.....	361.5	86.0	5,624
Dayton.....	63.7	24.7	2,058	New York.....	362.7	86.7	6,385
Other.....	767.9	43.5	1,252	Albany-Schenectady-Troy.....	124.2	33.0	2,324
Pennsylvania (Pittsburgh).....	70.4	80.2	3,623	Buffalo.....	7.4	0.1	107
South Carolina (Augusta, Ga.-S.C.).....	1,349.2	92.2	5,792	New York.....	224.6	49.2	3,691
Tennessee (Knoxville).....	1,577.6	175.9	13,205	Rochester.....	6.5	4.4	263
Texas (Amarillo).....	53.3	10.6	1,472	Ohio.....	951.1	100.4	5,198
Washington.....	1,064.4	115.7	8,143	Cincinnati, Ohio-Ky.-Ind.....	128.9	26.8	2,010
Foreign Countries.....	9.4	5.6	1,127	Columbus.....	1.0	2.6	209
Puerto Rico.....	6.5	2.0	327	Dayton.....	55.3	20.9	1,801
Japan.....	2.9	3.6	800	Other.....	765.9	50.1	1,178
				Pennsylvania (Pittsburgh).....	62.3	62.7	3,799
				South Carolina (Augusta, Ga.-S.C.).....	1,342.0	79.1	5,748
				Tennessee (Knoxville).....	1,567.0	171.1	12,779
				Texas.....	54.0	10.6	1,424
				Amarillo.....	52.4	9.9	1,380
				Houston.....	1.6	0.7	44
				Utah (Salt Lake City).....	1.2	1.0	72
				Washington.....	1,178.5	119.2	7,941
				Foreign Countries.....	8.9	5.4	1,114
				Puerto Rico.....	6.1	2.0	316
				Japan.....	2.8	3.4	798

Note: Certain installations shown in this table are omitted for the following reasons:

1. AEC Headquarters in Maryland, the Health and Safety Laboratory in New York City, and the New Brunswick Laboratory in New Jersey. These are staffed by Federal employees rather than contractor employees.
2. Nuclear power reactors operating as part of electric utility systems. There is little direct relationship between employment and the level of present or future AEC costs under the contracts.
3. Shut-down facilities. Operating costs and employment are not considered significant.
4. Twelve installations for which operating contractor employment data are not available. These are relatively small representing plant investment of approximately \$44 million and \$45 million for fiscal years 1967 and 1966, respectively.